(17,376.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1899.

No. 269.

JOSEPHINE DESERANT, ADMINISTRATRIX OF THE ESTATES OF HENRI DESERANT, JULES DESERANT, AND HENRI DESERANT, JR., PLAINTIFF IN ERROR,

vs.

CERILLOS COAL RAILROAD COMPANY.

IN ERROR TO THE SUPREME COURT OF THE TERRITORY OF NEW MEXICO.

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UNITED STATES OF AMERICA, *ss:*

The President of the United States to the honorable judges of the supreme court of the Territory of New Mexico, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in the said supreme court, before you, wherein Josephine Deserant, administratrix of the estate of Henri Deserant, was plaintiff in error, and The Cerrillos Coal Railroad Company was defendant in error, a manifest error hath happened, to the great damage of said Josephine Deserant, administratrix of the estate of Henri Deserant, as by her complaint appears, we, being willing that error, if any hath been, should be duly corrected and full and speedy justice be done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington on the first Monday of October next, in the said Supreme Court, to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the laws of the United States should be done.

Seal Supreme Court, Territory of New Mexico.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court, the 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

JOSÉ D. SENA,
Clerk of the Supreme Court of the Territory of New Mexico.

b I, clerk of the supreme court of the Territory of New Mexico, hereby certify that this writ of error was lodged in my office on the 21st day of February, 1899, together with a like writ of error in cases Nos. 778 and 779; that in said three cases there is but one record and set of proceedings in my office and in said supreme court, said three causes having been tried in the district court for Santa Fé county, New Mexico, as one case, and brought into this court for review on one record certified up from said district court, and were heard in this court as one case, and I therefore make return to this writ, together with said two other writs, by transmitting herewith, under my hand and the seal of said supreme court, a true copy of the record of proceedings, pleadings, and opinion filed in said three consolidated cases.

JOSÉ D. SENA,
Clerk Supreme Court, Territory of New Mexico.

Santa Fé, New Mexico, February 25, 1899.

c UNITED STATES OF AMERICA, *ss*:

The President of the United States to the honorable judges of the supreme court of the Territory of New Mexico, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in the said supreme court, before you, wherein Josephine Deserant, administratrix of the estate of Jules Deserant, was plaintiff in error, and Cerrillos Coal Railroad Company was defendant in error, a manifest error hath happened, to the great damage of the said Josephine Deserant, administratrix of the estate of Jules Deserant, as by her complaint appears, we, being willing that error, if any hath been, should be duly corrected and full and speedy justice be done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington on the first Monday of October next, in the said Supreme Court, to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the laws of the United States should be done.

Seal Supreme Court, Territory of New Mexico.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court, the 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

JOSÉ D. SENA,
Clerk of the Supreme Court of the Territory of New Mexico.

d I, clerk of the supreme court of the Territory of New Mexico, hereby certify that this writ of error was lodged in my office on the 21st day of February, 1899, together with a like writ of error in cases Nos. 777 and 778; that in said three cases there is but one record and set of proceedings in my office and in said supreme court, said three causes having been tried in the district court for Santa Fé county, New Mexico, as one case, and brought into this court for review on one record certified up from said district court, and were heard in this court as one case, and I therefore make return to this writ, together with said two other writs, by transmitting herewith, under my hand and the seal of said supreme court, a true copy of the record of proceedings, pleadings, and opinion filed in said three consolidated cases.

JOSÉ D. SENA,
Clerk Supreme Court of the Territory of New Mexico.

Santa Fé, New Mexico, February 25, 1899.

e UNITED STATES OF AMERICA, *ss:*

The President of the United States to the honorable judges of the supreme court of the Territory of New Mexico, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in the said supreme court, before you, wherein Josephine Deserant, administratrix of the estate of Henri Deserant, Jr., was plaintiff in error and Cerrillos Coal Railroad Company was defendant in error, a manifest error hath happened, to the great damage of the said Josephine Deserant, administratrix of the estate of Henri Deserant, Jr., as by her complaint appears, we, being willing that error, if any hath been, should be duly corrected and full and speedy justice be done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington on the first Monday of October next, in the said Supreme Court, to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the laws of the United States should be done.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court, the 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

Seal Supreme Court, Territory of New Mexico.

JOSÉ D. SENA,

Clerk of the Supreme Court of the Territory of New Mexico.

f I, clerk of the supreme court of the Territory of New Mexico, hereby certify that this writ of error was lodged in my office on the 21st day of February, 1899, together with a like writ of error in cases Nos. 777 and 779; that in said three cases there is but one record and set of proceedings in my office and in said supreme court, said three causes having been tried in the district court for Santa Fé county, New Mexico, as one case and brought into this court for review on one record certified up from said district court, and were heard in this court as one case, and I therefore make return to this writ, together with said two other writs, by transmitting herewith, under my hand and the seal of said supreme court, a true copy of the record of proceedings, pleadings, and opinion filed in said three consolidated cases.

JOSÉ D. SENA,

Clerk Supreme Court of the Territory of New Mexico.

Santa Fé, New Mexico, February 25, 1899.

g The United States of America to Cerrillos Coal Railroad Company, Greeting:

You are hereby cited and admonished to be and appear at a term of the Supreme Court of the United States, to be holden at Washington, on the first Monday of October next, pursuant to a writ of error filed in the clerk's office of the supreme court of the Territory of New Mexico, wherein Josephine Deserant, administratrix of the estate of Henri Deserant, Jr., was plaintiff in error and you are defendant in error, to show cause, if any there be, why the judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court of the United States, this 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

Seal Supreme Court, Territory of New Mexico.

WILLIAM J. MILLS,
Chief Justice of the Supreme Court of the Territory of New Mexico, etc.

As attorney for defendant in error mentioned in the foregoing citation, I accept service of copy of the within citation this 21st day of February, 1899.

R. E. TWITCHELL.

h The United States of America to Cerrillos Coal Railroad Company, Greeting:

You are hereby cited and admonished to be and appear at a term of the Supreme Court of the United States, to be holden at Washington, on the first Monday of October next, pursuant to a writ of error filed in the office of the clerk of the supreme court of the Territory of New Mexico, wherein Josephine Deserant, administratrix of the estate of Jules Deserant, was plaintiff in error and you are defendant in error, to show cause, if any there be, why judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court of the United States, this 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

Seal Supreme Court, Territory of New Mexico.

WILLIAM J. MILLS,
Chief Justice of the Supreme Court of the Territory of New Mexico, etc.

As attorney for defendant in error mentioned in the foregoing citation, I accept service of copy of the within citation this 21st day of February, 1899.

R. E. TWITCHELL.

The United States of America to Cerrillos Coal Railroad Company, Greeting:

You are hereby cited and admonished to be and appear at a term of the Supreme Court of the United States, to be holden at Washington, on the first Monday of October next, pursuant to a writ of error filed in the office of the clerk of the supreme court of the Territory of New Mexico, wherein Josephine Deserant, administratrix of the estate of Jules Deserant, was plaintiff in error, and you are defendant in error, to show cause, if any there be, why judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Seal Supreme Court, Territory of New Mexico.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court of the United States, this 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

WILLIAM J. MILLS,
Chief Justice of the Supreme Court of the Territory of New Mexico, etc.

As attorney for defendant in error mentioned in the foregoing citation, I accept service of copy of the within citation this 21st day of February, 1899.

R. E. TWITCHELL.

1 Be it remembered that on the 23rd day of July, A. D. 1898, there was filed in the office of the clerk of the supreme court of the Territory of New Mexico a transcript of record; which said transcript was and is in the words and figures following, to wit:

In the Supreme Court of the Territory of New Mexico, July Term, 1898.

JOSEPHINE DESERANT, Administratrix,
vs.
CERRILLOS COAL RAILROAD COMPANY.
} Nos. 777, 778, and 779.

Transcript of Record.

Error to Santa Fé county.

TERRITORY OF NEW MEXICO,
County of Santa Fé.

Be it remembered that heretofore, to wit, on the 28th day of May, 1895, there were filed in the office of the clerk of the district court for said county of Santa Fé three declarations, which declara-

2 tions were in the words and figures following, to wit:

TERRITORY OF NEW MEXICO, }
County of Santa Fé. }

In the District Court of the First Judicial District of the Territory of New Mexico, Sitting within and for the County of Santa Fé, in said District, for the Trial of Causes Arising under the Laws of the said Territory, at the June Term, 1895.

To the Honorable Napoleon B. Laughlin, associate justice of the supreme court of the Territory of New Mexico and judge of the first judicial district court thereof:

Your petitioner, Josephine Deserant, administratrix of the goods and chattels of Henri Deserant, Jr., deceased, thereunto duly appointed by the honorable, the probate court of the county of Santa Fé, in the Territory aforesaid, the said Henri Deserant, Jr., at the time of his death having had his domicile in the county of Santa Fé, aforesaid, and having died intestate, complains of the Cerrillos Coal Railroad Company, a corporation created, organized and existing under the laws of the Territory of New Mexico, of a plea of trespass.

For that, whereas, heretofore, to wit, on the twenty-seventy day of February, 1895, at to wit the county of Santa Fé aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and
3 was the duty of the said defendant to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous and explosive gases which were from time to time generated therein and to warn its employees engaged as such miners of any and all danger which might arise in the course of their employment as such miners from the generation and accumulation of such noxious, poisonous and explosive gases within the said mine, but the said defendant not regarding its said duty in the premises, negligently and carelessly failed to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein and to warn the employés of said defendant engaged as such coal miners of any and all danger which might arise in the course of their employment as such coal miners from the generation and accumulation of noxious, poisonous and explosive gases in the said mine; but the said defendant on the contrary thereof negligently and carelessly employed unfit, incompetent, unsuitable, unskillful and inexperienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein, and of the unfitness, incompetence, unsuitableness,
4 unskillfulness and inexperience of the persons so employed, the said defendant had or by the use of ordinary care might

have had, full knowledge, while the same was wholly unknown to the plaintiff's intestate, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine, at and near the place where the plaintiff's intestate was employed by the said defendant, and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action the said plaintiff alleges, that, heretofore, to wit, on the twenty-seventh day of February, 1895, at to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the defendant as a coal miner in said coal mine, and it then and there became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable and sufficient air
5 shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous and explosive gases, but the said defendant, not regarding its said duty in the premises, negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein, and to keep the working places in said mine free from such noxious, poisonous and explosive gases; but on the contrary thereof, the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air shafts and air passages, stoppings, break-throughs and other conduits through which a sufficient quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases, which from time to time were generated in said mine, and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages and stoppings, break-throughs and other conduits and passageways, that the pas-
6 sage of the air into and to the workings of that part of the said defendant's mine wherein the said plaintiff's intestate was employed, became and was obstructed and cut off and large

quantities of noxious, poisonous and explosive gases were generated and permitted to accumulate in that part of the said defendant's mine, at and near the place where the plaintiff's intestate was so employed as such miner, and the same were without fault or negligence on the part of the plaintiff's intestate; but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof, did then and there die; wherefore an action hath accrued to the said plaintiff to recover from the said defendant, damages in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, the said plaintiff say-: That heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain mine, known as and called the White Ash mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became the duty of the said defendant to furnish and provide fit, suitable and proper shafts, slopes, entries, air passages, break-throughs and stoppings, and other outlets and inlets in the excavating and operation of its said coal mine and to provide suitable and sufficient ma-
7 chinery and appliances for forcing pure air into said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases, which were from time to time generated therein, and to keep the working places of said mine free from such gases and it also became and was the duty of the said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings and machinery and appliances in good repair and condition, so that pure air might at all times and continuously, be forced through the same, but the said defendant not regarding its said duty in the premises negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine, and to provide suitable and sufficient machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places in said mine free from such gases, and the said defendant also negligently and carelessly failed to keep such machinery and applances, slopes, shafts, entries, air passages, break-throughs, stoppings and other outlets and inlets in good repair and condition so that pure air might at all times and continuously be forced through the same to the working places of the said mine, but, on the contrary thereof, the said defendant negligently and carelessly permitted and
8 suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said

mine, to become so out of repair and unsafe and insufficient that it became and was impossible to force into the said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases, which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous, and explosive gases, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the defendant and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross negligences and carelessness of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated, and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action the plaintiff alleges that heretofore, to wit, on the 27th day of February, 1895, at, to wit,

the county of Santa Fé, aforesaid, the defendant was the
9 owner of, and was engaged in the operation of a certain coal
mine, known as the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and was the duty of the said defendant to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous, and explosive gases which were from time to time generated therein and to warn its employees engaged therein of any and all danger which might arise in the course of their employment from the generation and accumulation of such noxious, poisonous and explosive gases within the said mine, and it also became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable and sufficient air shafts, air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and it also became and was the duty of the said defendant to furnish and provide fit, suitable, and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation of its said coal mine and to provide suitable machinery and appliances for forcing pure air into said mine in sufficient quantities
10 to dilute and render harmless and to expel therefrom
the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places of said mine free from such gases, and it also became and was the duty of the

said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings, machinery and appliances in good repair and condition so that pure air might at all times and continuously be forced through the same to the various working places in the said mine; but the said defendant not regarding its said duty in the premises, negligently and carelessly failed to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein and to warn the employees of said defendant engaged therein of any and all danger which might arise in the course of their employment from the generation and accumulation of noxious, poisonous and explosive gases in the said mine of the said defendant, and the said defendant negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places in said mine free from noxious, poisonous
11 and explosive gases, and the said defendant negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation of its said coal mine and negligently and carelessly failed to provide suitable machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such gases, and said defendant also negligently failed to keep such machinery and appliances, slopes, shafts, entries, air passages, break-throughs, stoppings and other outlets and inlets in good condition and repair so that pure air might at all times and continuously be forced through the same to the working places of the said mine; but on the contrary thereof the said defendant negligently and carelessly employed unfit, incompetent, inexperienced, unsuitable and unskillful persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein, and the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air passages, stoppings, break-throughs and other conduits through which a sufficient quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases
12 which from time to time were generated in said mine and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages, stoppings, shafts, break-throughs and other conduits, and passageways, that the pas-

sage of air into and through the works of that part of the mine aforesaid, where plaintiff's intestate was employed, was obstructed and cut off; and the said defendant negligently and carelessly furnished unfit, unsuitable and improper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine and furnished unsuitable and insufficient machinery and other appliances for forcing pure air into the working places of said mine to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from said gases, and the said defendant negligently and carelessly permitted and suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said mine to become so out of repair and unsafe and insufficient that it became and was impossible to force into said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein, and to keep the working places of said
13 mine free from such noxious, poisonous and explosive gases, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the said defendant, and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die.

Wherefor- an action hath accrued to said plaintiff to recover damages from said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, plaintiff alleges that heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and the said defendant on the day and year aforesaid at, to wit, the county of Santa Fé, aforesaid, negligently and carelessly and by its wrongful act, neglect and default caused the death of the plaintiff's intestate, the said plaintiff's intestate being without fault or negligence in the premises; whereby an action hath accrued to
14 the said plaintiff to recover from the said defendant damages in the premises.

Plaintiff therefore brings this suit and prays judgment against

the said defendant for the sum of twenty-five thousand dollars' damages, together with costs of suit.

FELIX H. LESTER,
FRANK W. CLANCY,
NEILL B. FIELD,
Attorneys for Plaintiff.

TERRITORY OF NEW MEXICO, }
County of Santa Fé. }

In the District Court of the First Judicial District of the Territory of New Mexico, Sitting within and for the County of Santa Fé, in said District, for the Trial of Causes Arising under the Laws of the said Territory, at the June Term, 1895.

To the Honorable Napoleon B. Laughlin, associate justice of the supreme court of the Territory of New Mexico and judge of the first judicial district court thereof:

Your petitioner, Josephine Deserant, administratrix of the goods and chattels of Henri Deserant, deceased, thereunto duly appointed by the honorable, the probate court of the county of Santa Fé, in the Territory aforesaid, the said Henri Deserant, at the time of his death having had his domicile in the county of Santa Fé, aforesaid, and having died intestate, complains of the Cerrillos Coal Railroad Company, a corporation created, organized and existing
15 under the laws of the Territory of New Mexico, of a plea of trespass.

For that, whereas, heretofore, to wit, on the twenty-seventy day of February, 1895, at to wit the county of Santa Fé aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and was the duty of the said defendant to employ fit, competent, suitable, skillful, and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous, and explosive gases which were from time to time generated therein and to warn its employees engaged as such miners of any and all danger which might arise in the course of their employment as such miners from the generation and accumulation of such noxious, poisonous, and explosive gases within the said mine, but the said defendant not regarding its said duty in the premises, negligently, and carelessly failed to employ fit, competent, suitable, skillful, and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous, and explosive gases which were from time to time generated therein and to warn the employés of said defendant engaged as such coal miners of any and all danger which might arise in the course of their employment as such coal miners from the generation and accumulation
16 of noxious, poisonous and explosive gases in the said mine; but the said defendant on the contrary thereof negligently

and carelessly employed unfit, incompetent, unsuitable, unskillful and inexperienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein, and of the unfitness, incompetence, unsuitableness, unskillfulness and inexperience of the persons so employed, the said defendant had or by the use of ordinary care might have had, full knowledge, while the same was wholly unknown to the plaintiff's intestate, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine, at and near the place where the plaintiff's intestate was employed by the said defendant and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

17 And for another and further cause of action the said plaintiff alleges, that, heretofore, to wit, on the twenty-seventh day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the defendant as a coal miner in said coal mine, and it then and there became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous and explosive gases, but the said defendant, not regarding its said duty in the premises, negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein, and to keep the working places in said mine free from such noxious, poisonous and explosive gases; but on the contrary, thereof the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air shafts and air passages, stoppings, break-throughs and other conduits

18 through which a sufficient quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases, which

from time to time were generated in said mine, and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages and stoppings, break-throughs and other conduits and passageways, that the passage of the air into and to the workings of that part of the said defendant's mine wherein the said plaintiff's intestate was employed, became and was obstructed and cut off and large quantities of noxious, poisonous and explosive gases were generated and permitted to accumulate in that part of the said defendant's mine, at and near the place where the plaintiff's intestate was so employed as such miner, and the same were without fault or negligence on the part of the plaintiff's intestate; but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof, did then and there die; wherefore an action hath accrued to the said plaintiff to recover from the said defendant, damages in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, the said plaintiff say-: That heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant
19 was the owner of and engaged in the operation of a certain mine, known as and called the White Ash mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became the duty of the said defendant to furnish and provide fit, suitable and proper shafts, slopes, entries, air passages, break-throughs and stoppings, and other outlets and inlets in the excavating and operation of its said coal mine, and to provide suitable and sufficient machinery and appliances for forcing pure air into said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases, which were from time to time generated therein, and to keep the working places of said mine free from such gases and it also became and was the duty of the said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings and machinery and appliances in good repair and condition, so that pure air might at all times and continuously be forced through the same, but the said defendant not regarding its said duty in the premises negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine, and to provide suitable and sufficient machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated
20 therein and to keep the working places in said mine free from such gases, and the said defendant also negligently and carelessly failed to keep such machinery and appliances, slopes, shafts, entries, air passages, break-throughs, stoppings and other

outlets and inlets in good repair and condition so that pure air might at all times and continuously be forced through the same to the working places of the said mine, but, on the contrary thereof, the said defendant negligently and carelessly permitted and suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said mine, to become so out of repair and unsafe and insufficient that it became and was impossible to force into the said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous, and explosive gases, which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous, and explosive gases, whereby and by means whereof large quantities of noxious, poisonous, and explosive gases became and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the defendant and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross negligence and carelessness of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised,
21 and suffocated, and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action the plaintiff alleges that heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the defendant was the owner of, and was engaged in the operation of a certain coal mine, known as the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and was the duty of the said defendant to employ fit, competent, suitable, skillful, and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous, and explosive gases which were from time to time generated therein and to warn its employees engaged therein of any and all danger which might arise in the course of their employment from the generation and accumulation of such noxious, poisonous, and explosive gases within the said mine, and it also became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable, and sufficient air shafts, air passages, stoppings, break-throughs, and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous, and explosive
22 gases which from time to time were generated therein and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and it also became and was the duty of the said defendant to furnish and provide fit, suitable, and proper shafts, slopes, entries, air passages, break-throughs, stoppings

and other outlets and inlets in the excavation of its said coal mine and to provide suitable machinery and appliances for forcing pure air into said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places of said mine free from such gases, and it also became and was the duty of the said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings, machinery and appliances in good repair and condition so that pure air might at all times and continuously be forced through the same to the various working places in the said mine; but the said defendant not regarding its said duty in the premises, negligently and carelessly failed to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein and to warn the employees of said defendant engaged therein of any and all danger which might arise in the course of their employment from the generation and accumulation of noxious, poisonous and explosive gases in the said
23 mine of the said defendant, and the said defendant negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places in said mine free from noxious, poisonous and explosive gases, and the said defendant negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation of its said coal mine and negligently and carelessly failed to provide suitable machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such gases, and said defendant also negligently failed to keep such machinery and appliances, slopes, shafts, entries, air passages, break-throughs, stoppings and other outlets and inlets in good condition and repair so that pure air might at all times and continuously be forced through the same to the working places of the said mine; but on the contrary thereof the said defendant negligently and carelessly employed unfit, incompetent, inexperienced, unsuitable and unskillful persons to superintend and oversee the opera-
24 tion of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein, and the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air passages, stoppings, break-throughs and other conduits through which a sufficient quantity of pure air could not be forced by proper

appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated in said mine and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages, stoppings, shafts, break-throughs and other conduits, and passageways, that the passage of air into and through the works of that part of the mine aforesaid, where plaintiff's intestate was employed, was obstructed and cut off; and the said defendant negligently and carelessly furnished unfit, unsuitable and improper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine and furnished unsuitable and insufficient machinery and other appliances for forcing pure air into the working places of said mine to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from said gases, and the said defendant negligently and carelessly permitted and suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said mine to become so out of repair and unsafe and insufficient that it became and was impossible to force into said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein, and to keep the working places of said mine free from such noxious, poisonous and explosive gases, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the said defendant, and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die.

25

Wherefor- an action hath accrued to said plaintiff to recover damages from said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, plaintiff alleges that heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and the said defendant on the day and year aforesaid at, to wit, the county of Santa Fé, aforesaid, negligently and carelessly and by its wrongful act, neglect and default caused the death of the plaintiff's intestate, the said plaintiff's intestate being without fault or negligence in the premises; whereby an action

26

hath accrued to the said plaintiff to recover from the said defendant damages in the premises.

Plaintiff therefore brings this suit and prays judgment against the said defendant for the sum of twenty-five thousand dollars' damages, together with costs of suit.

FELIX H. LESTER,
FRANK W. CLANCY,
NEILL B. FIELD,
Attorneys for Plaintiff.

TERRITORY OF NEW MEXICO, }
County of Santa Fé. }

In the District Court of the First Judicial District of the Territory of New Mexico, Sitting within and for the County of Santa Fé, in said District, for the Trial of Causes Arising under the Laws of the said Territory, at the June Term, 1895.

To the Honorable Napoleon B. Laughlin, associate justice of the supreme court of the Territory of New Mexico and judge of the first judicial district court thereof:

27 Your petitioner, Josephine Deserant, administratrix of the goods and chattels of Jules Deserant, deceased, thereunto duly appointed by the honorable, the probate court of the county of Santa Fé, in the Territory aforesaid, the said Jules Deserant, at the time of his death having had his domicile in the county of Santa Fé, aforesaid, and having died intestate, complains of the Cerrillos Coal Railroad Company, a corporation created, organized and existing under the laws of the Territory of New Mexico, of a plea of trespass.

For that, whereas, heretofore, to wit, on the twenty-seventh day of February, 1895, at to wit the county of Santa Fé aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and was the duty of the said defendant to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous and explosive gases which were from time to time generated therein and to warn its employees engaged as such coal miners of any and all danger which might arise in the course of their employment as such miners from the generation and accumulation of such noxious, poisonous and explosive gases within the said mine, but the said defendant not regarding its said duty in the premises, negligently and care-
28 lessly failed to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein and to warn the employés of said defendant engaged as such coal miners of any and all danger which might arise

in the course of their employment as such coal miners from the generation and accumulation of noxious, poisonous and explosive gases in the said mine; but the said defendant, on the contrary thereof negligently and carelessly employed unfit, incompetent, unsuitable, unskillful and inexperienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein, and of the unfitness, incompetence, unsuitableness, unskillfulness and inexperience of the persons so employed, the said defendant had or by the use of ordinary care might have had, full knowledge, while the same was wholly unknown to the plaintiff's intestate, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine, at and near the place where the plaintiff's intestate was employed by the said defendant, and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited
29 and set on fire and exploded with great and terrific force and violence whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action the said plaintiff alleges, that, heretofore, to wit, on the twenty-seventh day of February, 1895, at to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the defendant as a coal miner in said coal mine, and it then and there became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous and explosive gases, but the said defendant, not regarding its said duty in the premises, negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which
30 might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein, and to keep the working places in said mine free from such noxious, poisonous and explosive gases; but on the contrary thereof, the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air shafts and air passages, stoppings, break-throughs and other conduits through which

a sufficient quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases, which from time to time were generated in said mine, and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages and stoppings, break-throughs and other conduits and passageways, that the passage of the air into and to the workings of that part of the said defendant's mine wherein the said plaintiff's intestate was employed, became and was obstructed and cut off and large quantities of noxious, poisonous and explosive gases were generated and permitted to accumulate in that part of the said defendant's mine, at and near the place where the plaintiff's intestate was so employed as such miner, and the same were without fault or negligence on the part of the plaintiff's intestate; but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific
31 force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof, did then and there die; wherefore an action hath accrued to the said plaintiff to recover from the said defendant, damages in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, the said plaintiff say-: That heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain mine, known as and called the White Ash mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became the duty of the said defendant to furnish and provide fit, suitable and proper shafts, slopes, entries, air passages, break-throughs and stoppings, and other outlets and inlets in the excavating and operation of its said coal mine, and to provide suitable and sufficient machinery and appliances for forcing pure air into said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases, which were from time to time generated therein, and to keep the working places of said mine free from such gases and it also became and was the duty of the said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings and machinery and appliances in good repair and condition, so that pure air might at all times and continuously, be forced through the same, but the said defendant not regarding its said duty in the premises
32 negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine, and to provide suitable and sufficient machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places in said mine free from such gases, and

the said defendant also negligently and carelessly failed to keep such machinery and appliances, slopes, shafts, entries, air passages, break-throughs, stoppings and other outlets and inlets in good repair and condition so that pure air might at all times and continuously be forced through the same to the working places of the said mine, but, on the contrary thereof, the said defendant negligently and carelessly permitted and suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said mine, to become so out of repair and unsafe and insufficient that it became and was impossible to force into the said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases, which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous,
and explosive gases, whereby and by means whereof large
33 quantities of noxious, poisonous and explosive gases became
and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the defendant and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross negligences and carelessness of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated, and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action the plaintiff alleges that heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the defendant was the owner of, and was engaged in the operation of a certain coal mine, known as the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and was the duty of the said defendant to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous, and explosive gases which were from time to time generated therein and to warn its employees engaged therein of any and all danger which might arise in the course of
their employment from the generation and accumulation
34 of such noxious, poisonous and explosive gases within
the said mine, and it also became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable and sufficient air shafts, air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places

of said mine free from such noxious, poisonous and explosive gases, and it also became and was the duty of the said defendant to furnish and provide fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation of its said coal mine and to provide suitable machinery and appliances for forcing pure air into said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places of said mine free from such gases, and it also became and was the duty of the said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings, machinery and appliances in good repair and condition so that pure air might at all times and continuously be forced through the same to the various working places in the said mine: but the said defendant not regarding its said duty in the premises, negligently and carelessly failed to
35 employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein and to warn the employees of said defendant engaged therein of any and all danger which might arise in the course of their employment from the generation and accumulation of noxious, poisonous and explosive gases in the said mine of the said defendant, and the said defendant negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places in said mine free from noxious, poisonous and explosive gases, and the said defendant negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation of its said coal mine and negligently and carelessly failed to provide suitable machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such gases, and said defendant
36 also negligently failed to keep such machinery and appliances, slopes, shafts, entries, air passages, break-throughs, stoppings and other outlets and inlets in good condition and repair so that pure air might at all times and continuously be forced through the same to the working places of the said mine; but on the contrary thereof the said defendant negligently and carelessly employed unfit, incompetent, inexperienced, unsuitable and unskillful persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time gen-

erated therein, and the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air passages, stoppings, break-throughs and other conduits through which a sufficient quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated in said mine and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages, stoppings, shafts, break-throughs and other conduits, and passageways, that the passage of air into and through the works of that part of the mine aforesaid, where plaintiff's intestate was employed, was obstructed and cut off; and the said defendant negligently and carelessly furnished unfit, unsuitable and improper shafts, slopes, entries,

37 air passages, break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine and furnished unsuitable and insufficient machinery and other appliances for forcing pure air into the working places of said mine to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from said gases, and the said defendant negligently and carelessly permitted and suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said mine to become so out of repair and unsafe and insufficient that it became and was impossible to force into said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein, and to keep the working places of said mine free from such noxious, poisonous and explosive gases, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the said defendant, and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and ter-

38 rific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die.

Wherefor- an action hath accrued to said plaintiff to recover damages from said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, plaintiff alleges that heretofore, to wit: on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and the said defendant on the day and year aforesaid at, to wit, the

county of Santa Fé, aforesaid, negligently and carelessly and by its wrongful act, neglect and default caused the death of the plaintiff's intestate, the said plaintiff's intestate being without fault or negligence in the premises; whereby an action hath accrued to the said plaintiff to recover from the said defendant damages in the premises.

Plaintiff therefore brings this suit and prays judgment against the said defendant for the sum of twenty-five thousand dollars damages, together with costs of suit.

FELIX H. LESTER,
FRANK W. CLANCY,
NEILL B. FIELD,
Attorneys for Plaintiff.

39 And afterwards, to wit, on the first day of June, 1895, there *was* filed in the said office of said clerk, three pleas, which said pleas were in the words and figures following, to wit:

In the District Court, County of Santa Fé, Territory of New Mexico.

JOSEPHINE DESERANT, Adm'x, Plaintiff,
vs.
CERRILLOS COAL RAILROAD COMPANY, Defendant. } No. 3580.

And the said defendant, by Henry L. Waldo and R. E. Twitchell, Esquires, its attorneys, comes and defends the wrong and injury, when, &c., and says that it is not guilty of the said supposed grievances above laid to its charge, or any or either of them, or any part thereof, in manner and form as the said plaintiff hath above thereof complained against it. And of this the said defendant puts itself upon the country, &c.

H. L. WALDO,
R. E. TWITCHELL,
Attorneys for Defendant.

And the said plaintiff doth the like.

NEILL B. FIELD,
FELIX H. LESTER,
F. W. CLANCY,
Attorneys for Plaintiff.

40 In the District Court, County of Santa Fé, Territory of New Mexico.

JOSEPHINE DESERANT, Adm'x, Plaintiff,
vs.
CERRILLOS COAL RAILROAD COMPANY, Defendant. } No. 3581.

And the said defendant by Henry L. Waldo and R. E. Twitchell, Esquires, its attorneys, comes and defends the wrong and injury, when &c., and says that it is not guilty of the said supposed grievances above laid to its charge, or any or either of them, or any part thereof, in manner and form as the said plaintiff hath above thereof

complained against it. And of this the said defendant puts itself upon the country, &c.

H. L. WALDO,
R. E. TWITCHELL,
Attorneys for Defendant.

And the said plaintiff doth the like.

NEILL B. FIELD,
FELIX H. LESTER,
F. W. CLANCY,
Attorneys for Plaintiff.

In the District Court, County of Santa Fé, Territory of New Mexico.

JOSEPHINE DESERANT, Adm'x, Plaintiff,
vs.
CERRILLOS COAL RAILROAD COMPANY, Defendant. } No. 3582.

41 And the said defendant by Henry L. Waldo and R. E. Twitchell, Esquires, its attorneys, comes and defends the wrong and injury, when &c., and says that it is not guilty of the said supposed grievances above laid to its charge, or any or either of them, or any part thereof, in manner and form as the said plaintiff hath above thereof complained against it. And of this the said defendant puts itself upon the country, &c.

H. L. WALDO,
R. E. TWITCHELL,
Attorneys for Defendant.

And the said plaintiff doth the like.

NEILL B. FIELD,
FELIX H. LESTER,
F. W. CLANCY,
Attorneys for Plaintiff.

And afterwards, to wit, at a special term of the said district court, begun and held for the trial of causes arising under the laws of said Territory in said county of Santa Fé, and on the 22d day of April, 1896, the following, among other, proceedings were had in said court:

JOSEPHINE DESERANT, Adm'x,
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580. Trespass.

JOSEPHINE DESERANT, Adm'x,
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3581. Trespass.

42 JOSEPHINE DESERANT, Adm'x,
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3582. Trespass.

This day comes the plaintiff in each of the above and foregoing cases, and moves the court to consolidate the same for the purpose

of trial, and to order that the said causes shall be tried together before the same jury, and file herein the affidavit of Neill B. Field in support of said motion, and the court having seen the said motion, and being fully advised in the premises and concerning the same, doth order that said motion be and the same is hereby granted.

And afterwards, to wit, at the regular December term, 1897, of said court, and on the fourth day of said term, the same being the 16th day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

Now comes the said plaintiff by her attorney-, Neill B. Field and F. W. Clancy, Esqrs., and the said defendant by R. E. Twitchell, Esq., and issue having heretofore been joined between the parties, they proceed to the selection of a jury to try the three cases so consolidated.

And afterwards, to wit, at the term last aforesaid of said court, and on the fifth day of said term, the same being the 17th
43 day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant by its attorney, R. E. Twitchell, Esq. Thereupon comes a jury, to wit:

Abram Velarde	Manuel Roibal
Amade L'Baca	Esquipolo Martinex de Aguero
Jose Maria Lopez	Agapito Vigil
Felipo Romero	Geronimo Benavides
Reyes Vigil	Francisco Vigil
Anastacio Sandoval	Tomas Erwin.

Twelve good and lawful men of the body of the county of Santa Fé, who, being duly elected, empaneled and sworn the truth to speak upon the issues joined between the parties, listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the sixth day of said term, the same being the 18th day of December, 1897, the following, among other proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

44 And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant by its attorney, R. E. Twitchell, Esqr., again comes the jury heretofore empaneled in said cause and listen to a portion of the evidence.

And afterwards, to wit, at the term, last aforesaid of said court, and on the seventh day of said term, the same being the 20th day of December, 1897, the following, among other proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs, and again comes the said defendant by its attorney, R. E. Twitchell, Esqr., again comes the jury heretofore empaneled in said cause and listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the eighth day of said term, the same being the 21st day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

45 And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant by its attorney R. E. Twitchell, Esqr., again comes the jury heretofore empaneled in said cause and listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the ninth day of said term, the same being the 22d day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant by its attorney, R. E. Twitchell, Esqr., again comes the juro heretofore empaneled in said cause, and listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the tenth day of said term, the same being the 23d day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant by its attorney, R. E. Twitchell, Esqr., again comes
46 the jury heretofore empaneled in said cause and listen to a portion of the evidence.

By consent of counsel for both parties it is ordered that further proceedings in said cause be and *is* hereby adjourned until Monday morning, the 27th inst. at nine o'clock.

And afterwards, to wit, at the term last aforesaid of said court, and on the thirteenth day of said term, the same being the 27th day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the defendant by its attorney, R. E. Twitchell, Esqr., again comes the jury heretofore empaneled, in said cause and listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the fourteenth day of said term, the same being the 28th day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys,
47 Neill B. Field and Frank W. Clancy, Esqrs., and again comes said defendant by its attorney R. E. Twitchell, Esqr., again comes the jury heretofore empaneled in said cause and listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the fifteenth day of said term, the same being the 29th day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff, by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant, by its attorney, R. E. Twitchell, again comes the jury heretofore empaneled in said cause and hears the remainder of the evidence, instructions of the court, and a portion of the argument of counsel.

And afterwards, to wit, at the term last aforesaid of said court, and on the sixteenth day of said term, the same being the 30th day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff, by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the
48 said defendant, by its attorney, R. E. Twitchell, Esqr., again comes the jury heretofore empaneled in said cause and hears the remainder of the argument of counsel, and retire to deliberate upon their verdict in the above three causes, and returning into court do say upon their oaths aforesaid, in each of the three said causes:

"We, the jury, find the issues in the above-entitled cause in favor of the defendant."

AMADO L. BACA, *Foreman.*

Whereupon the plaintiff gives notice of a motion for a new trial.

And afterwards, to wit, at the term last aforesaid of said court, and on the twenty-second day of said term, the same being the 6th day of January, 1898, the following among other proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

This cause coming on to be heard on a motion for a new trial heretofore filed herein, and after hearing argument of counsel of the respective parties, the court not being sufficiently advised in the premises, takes the same under advisement.

And afterwards, to wit, at the term last aforesaid of said court, and on the forty-seventh day of said term, the same being the 4th day of February, 1898, the following, among other, proceedings were had, to wit:

49 JOSEPHINE DESERANT, Adm'x, ET AL. *vs.* CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

These causes coming on to be heard on the motion of the plaintiff for a new trial and the court being fully advised, it is ordered that said motions be and the same hereby are overruled, and the court orders it to be certified upon the record that said motion is overruled upon the ground that there was a conflict of evidence in the cases and this court is of opinion that in such a case it has no discretion to set aside the said verdicts as against the weight of the evidence.

And afterwards, to wit, on the twenty-second day of June, 1898, there was filed in the office of said clerk a bill of exceptions, which bill of exceptions was in the words and figures following, to wit:

50 In the District Court of the First Judicial District of the Territory of New Mexico for the County of Santa Fé.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. } No. 3580.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. } No. 3581.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. } No. 3582.

} Consolidated.

Be it remembered, that on the trial of the above-entitled causes, the following proceedings were had, to wit:

JOSEPHINE DESERANT, being sworn as a witness in her own behalf, testified that she lived in Madrid, New Mexico, that her husband was dead, that his name was Henri Deserant; that he died on the 27th of February, 1895, at Madrid; that Henri Deserant the younger and Jules Deserant were her sons, and that they died with their father at the same time; at the time that they died her hus-
51 band was fifty-three years of age, her son Henri was seventeen years of age and her son Jules was a little over fifteen years of age; they were working in the White Ash mine at the time of their deaths and that her husband was engaged in coal mining; that she saw her husband and sons about 6.30 in the morning of the day that they were killed and that she had never seen them afterwards; that her husband was in good condition and had good health up to the time of his death and was able to earn sometimes $3.50 per day and $3.00 and sometimes $2.50 per day; that both of her sons were in good condition and good health and could earn, the elder from two to two dollars and a half per day, and the other,

one and one and a half a day; that her husband was a sober, hard-working man and treated his family well and that her sons were both of good character and good deportment.

On cross-examination the witness further testified that she was at her house on the morning of the accident, and was notified of the accident by one of her sons; that while she could not say exactly, she thought her husband and sons had been working in the mines for not quite a year; that her husband had had his right shoulder broken in the same mine; that when the accident happened she was left absolutely without means and had to work to make her living, and had a little girl left; that the youngest boy had worked in the mines three or four or five months and the other boy about a year or not quite a year; that during the time they worked in the mine with her husband they brought all their money to her, for her to use it, and the bal-
52 ance of her family; that her husband worked continuously until he was hurt and then he didn't work; that he worked with his sons prior to the time when his arm was broken; that both of her sons did not at once go to work when she first moved to Madrid; that she could not say whether her youngest son did not go to work until after her husband had recovered from the breaking of his arm; that the youngest son had worked about two months when the explosion happened and the older one a much longer time; that her husband was disabled by the accident to his arm or shoulder about six months.

On redirect examination she testified that her husband recommenced to work in the mines about two and a half or three months before the explosion.

On recross-examination she testified that her elder son had worked before the younger one went in, but that it was not the case that the younger one went to work because her husband's arm was weak, but because the boy wanted to work.

J. C. PORTERFIELD, being sworn as a witness for the plaintiff, testified that he was twenty-nine years old, lived at Madrid and was a mining engineer, and that his residence and occupation were the same in February, 1895, at which time he was employed by defendant; that a map which was in the court-room was a map showing the inside works of the White Ash mine on the 27th of February, 1895, that he made the map and that it was drawn to a scale of one hundred feet to the inch; that the straight
53 line which runs down the center of the map from the top to the bottom indicates the main slope; that there were three colors of ink upon the map, black, blue and green; that the black indicates the workings, the blue the main air current and the green canvas brattice; that where the green or canvas was put in, was for the purpose of taking the air to certain parts; that the main slope or two edges were indicated by black lines extending its full length; that down the main slope for seven or eight hundred feet were old workings of which no correct map exists; that there was a pillar of coal forty feet thick left on each side of the main

slope, not cut except by cross-cuts or entries, the cross-cuts extending from the main slope to the back slopes or parallel slopes, which were driven parallel to the main slope for the purpose of returning the air; that at distances of between two and three hundred feet, entries were dug in the coal approximately at right angles to the main slope, and that these entries were called number one right, number two right, number one left and so on down; that the entries were driven in pairs, with thirty-feet pillars between the two; that they were driven in pairs to maintain the circulation of air; that what is called the back entry is lower than the top entry, and also acts as drainage for the top entry, which is used as a hauling road; that from the top entry rooms are turned and driven at an angle across the pitch of the coal, neither on a level nor directly up the pitch, but between; these rooms were driven a short distance only about nine or ten feet wide and then widened out to twenty feet
54 at which width they were maintained; that these rooms were from the lower rib of one room to the lower rib of the next room forty feet, that is twenty feet of room and twenty feet of coal between rooms; there being cross-cuts between the rooms for the passage of air; that where the entries were turned off the slope two tracks were laid which are called the parting, one track being for loaded cars and the other for empties, each track holding from twelve to fifteen cars; that inside of the parting was a trap-door indicated on the map by a short line at an angle so as to show which way the door opens; that there were no rooms turned off between the door and the main slope, but beyond the door, there was first driven what is called a plane; that the plane is kept narrow, from eight to ten feet in width, and driven in the same direction as the rooms, which were afterwards to be turned from the entry, and from this plane rooms were turned running back level toward the main slope so as to extract the coal lying above the parting, and these are called "the rooms off the plane," and are driven of the same dimensions as the other rooms; that the rooms off the plane were numbered 1, 2, 3, etc., commencing at the bottom, and the rooms off the main entry were numbered 1, 2, 3, etc., beginning at the first room beyond the plane; that when any body of coal was worked out the pillars were "pulled," that is, the coal which was left standing between the rooms was taken out and this was indicated by the small checkwork on the map, as for instance in the first left entry from room 2 to the face of the entry; that the air was kept in cir-
55 culation by a fan at the point marked fan-house where the arrows indicate the discharge of air; that the arrows at the entrance of the main slope show the "intake" and from that point the air followed the line indicated in blue ink; that the air entering at the mouth of the mine follows the main slope until it reaches the seventh right entry where it is divided or split, part going to the right and the remainder going on to the bottom of the slope, thence through the last cross-cut to the left parallel slope and then passing up successively through the seventh left entry into the parallel slope again, through the sixth left back entry to its face and around canvas brattice back to the last cross-cut, thence through that cross-

cut and to the face of the sixth left entry where it passes around canvas and back to the cross-cut leading to the upper air course of the sixth left entry, then to the parallel slope and up to the fifth left back entry, to the face of that back entry and around canvas brattice back to the last cross-cut and through that cross-cut to the fifth left main entry, and thence up to the face of that main entry around canvas and back to the plane of fifth left entry, and then up the plane and through the first, second and third rooms, and then through a cross-cut into room one of the entry and up room one into the fourth left back entry and up to the face of that back entry; that the fourth left entry was sixteen hundred and fifty feet long and the fourth left air course was one hundred and twenty-five feet back; that the air then goes through the cross-cut at the face of the back entry to the main entry and then up to the face of the main
56 entry and around canvas brattice and back along the entry; that there might have been a short piece of canvas extended into room eighteen, it being a room just then turned; that the air left the fourth left main entry at room seventeen, going up room seventeen and through the cross-cut into sixteen, around canvas to the face of sixteen and back to the cross-cut and through the cross-cut into fifteen, and so on from room to room back as far as room six, which was driven through into the third left back entry so as to give a shorter return for part of the air; that the other portion of the air was conducted through cross-entries in the same way on to the plane and through the rooms of the plane and carried up to the third left back entry through room one which was driven through; that the air after entering the third left back entry traveled to the face of that entry and through the cross-cut at the face up to the main entry and to the face of the main entry around canvas, airing room twenty-one and then into room twenty and up to its face, and around the faces of the rooms and through cross-cuts in the same manner as through the rooms of the fourth left back to room eight where the air was split, part going to the second left back entry through the opening of room eight made into that back entry and part being conducted through the other rooms and the plane, through the plane-rooms and up the plane to the second left back entry; that the air then traveled to the face of that back entry and through the last cross cut to the top entry and back along the top entry to room nine and around canvas to
57 the face of nine, then back the other side of the canvas to the entry again, then up through room eight, through the cross-cut into seven and then through these rooms in the same manner as below, to the plane, through the plane-rooms into the first left back entry and through the back entry and top entry to the beginning of the first left entry at the overcast or air-tight box built above the main slope; that at the other end of this overcast this air is joined by the air that has been traveling the right side of the mine and goes up to the old union slope near the mouth of which is the fan; that the fan is an exhaust fan and tends to produce a vacu-m; that the entries driven in pairs as above indicated, are

kept about the same distance from the slope and the only open cross-cut between them is somewhere near the face and when the entries are driven some distance beyond this cross-cut, a new cross-cut is dug between the entries, the previous cross-cut being closed up with a stopping, so that the air is forced to travel through the new cross-cut and marks on the map in the cross-cuts indicate these stoppings; that there should be no break in the continuity of the blue line on the map, which indicates the course of the air and that the air would take the course described if all the stoppings in the mine were air-tight.

Upon cross-examination the witness further testified that the third left entry was one hundred and fifty feet longer than the fourth left; that the air, if it met with no interruption, would pass the face of the third left entry before reaching the
58 overcast; that the distance that the air travels from the face of the fourth left to the face of the third left would be a little over three thousand feet; that the blue line on the map represents the course of the air through the left side of the mine and that it passes through room eight of the fourth left, that the air is conducted to faces of the rooms of the fourth left around canvas brattice, which separates the rooms longitudinally, being hung from the roof; that the green lines on the map indicate brattice, which, if in place, conducts the air to the faces of the room; that there is no direct air course to supply air to the lower portions of the rooms, but merely what air would go in there would be deviated from the regular course, such as by mules raising the curtains or such as might come in when the doors would be open; that there were usually five or six curtains hung across the entry between the inside room that had a cross-cut and the main slope, the object of these curtains being to make the air go up into the room instead of traveling along the entry.

On redirect examination the witness further testified that these curtains were hung all the way across the entry, and were tight, but they were not nailed at the bottom between the rails; that they were not in a solid piece, but had several thicknesses lapping over each other so that a man could lift them up and go in; that when a man or mule or car went through the curtains, a very little portion of air was carried because at the time one curtain would
59 be open there would be others which were tight, unless there happened to be some one going through all at the same time.

Plaintiff then offered in evidence the map about which witness testified, which was admitted as Plaintiff's "Exhibit A," and the original thereof is sent up to the supreme court with their bill of exceptions, in accordance with the order of the district court.

(See side page 517.)

J. W. RAY, being sworn as a witness for plaintiff, testified that his business was coal mining and that in February, 1895, he was fire boss in the White Ash mine for the defendant; that Mr. Donahue employed him as fire boss; that he worked for defendant in the

hard coal from September until January and went to the White Ash about the first of January; that he had been working in gas more or less ever since he had been digging coal and had been assistant fire boss in the Indian Territory for five or six months, but had not ever been employed regularly as fire boss in a mine; that Donohue did not give him any instructions as to his duty, but showed him around the mine and he knew his duty after that; that he never saw any written rules or regulations for the government of miners in force in that mine in February, 1895; that there was an explosion in the White Ash mine on the 27th of February, 1895; that he was fire boss at the time; that there were two fire bosses, Deighton being the name of the other; that there were two because there were two shifts working, one at night and the other in the daytime;
that he was the night fire boss; that he could not say exactly
60 when the double shift was put on, but that there were not
two shifts when he started in January; that at the time Donohue employed him the latter showed him around the places working on the right side in the fifth right and the sixth right, and then they went to the bottom of the slope and through the cross-entry into the back slope and up to the seventh left back entry and into the main entry and up through the back slope to the sixth back entry, and then to the face of the main entry and back to the back slope, and through that to the fifth and to the face of the fifth back entry, and into the fifth main entry, and then went up number one room to the fourth back entry where they came to some water, and Donohue told him it was not necessary to go through there, that he would get his feet wet; that they then came back along the back entry from the water to the trap door, which was in the slant from the main entry; that they went up the main entry and down through a cross-cut to the face of the back entry, and up to the face of the main entry, and back through the face of all of the rooms on the fourth left, and then up to the third back entry and to the face of that back entry, through on the main entry and around the rooms there; that on the 27th of January, 1895, there was water in the fourth left air course, but he could not say how much, and that from that time until the explosion that air course was never free from water; that there was a syphon to drain the water out of that air course; that he never knew it to run between the 27th of January,
1895, and the explosion; that he could not tell how much
61 water there was in there immediately prior to the explo-
sion, but that there was quite a quantity; that it was somewhere around the neighborhood of between two hundred and three hundred feet in length; that that accumulation of water was in his way a little in the discharge of his duties as fire boss; that Donohue was the pit boss; that shortly before the explosion he told Donohue that he had too much work to do, if he would take that water out of there it would shorten his run, or else give him a man to hang canvas; that Donohue told him his orders were to hoist no water, but he would give him a man; that this was probably four or five days or a week before the explosion; that he did not give him a man; that the miners working on the fourth left entry had no means

of knowing of the water in the fourth left air course because it was not the way that they went in to work; that he did not remember ever seeing the book marked Exhibit "B;" that his duties as fire boss were to go to every place where men were working and see that it was safe before they went in; that it was one of his duties to attend to the hanging of brattice or canvas; that if he found gas in a place he would go back to where it would be safe for a miner with a naked light and put a fire-mark on a tie or shovel, over which a coal-digger would not go; that he usually told a man about gas in his place as he was going down; that it was the duty of the fire boss to see every miner as he went into the mine and tell
him whether or not his place was safe; that usually
62 when he had found gas he would give the coal-digger
a safety lamp unless there was a quantity, and then he told him to wait for the fire boss to come around whose duty it was to get the gas out; that there was no rule or custom in that mine known to miners whereby a dangerous quantity of explosive gas was permitted to accumulate in an open place in that mine and remain for as long as forty-eight hours protected only by a fire-mark; that he inspected the mine the last time before the explosion on Tuesday night; that he understood the map marked Exhibit "A" and could show on it the course which he took in making that inspection; that he started at the mouth of the main slope, came down to the lamp cabin on the left side and went into the first right and upon the plane, then to the face of the face of the first right, back to the main entry and down to the second; then he went in on the plane of the second. The witness then went on to describe his course of inspection throughout the mine, going into each place where men were working on the right side of the mine until he reached the foot of the main slope, and from there he came up the left side of the mine following substantially the same course as that described by the witness, Porterfield, as being the course of the air in its passage through the left side of the mine, but somewhat more in detail, the differences being that his inspection finished at the second left entry whence he passed out to the main slope, and also he shows that he did not pass through the fourth left air course although he did visit the face of that air course
by coming down from the main entry through a cross-
63 cut into the air course. The witness then testified that his
description was not accurate as to the inspection made by him on Tuesday night before the explosion because at that time he did not visit rooms 5, 6, 7, 8, 9, 10, and 11 on the fourth left entry because they were finished and as he had a lot of work to do he did not think it was necessary; that the last time before the explosion when he was at the face of room eight, was on Monday night; that he found no fire-mark in that room at that time, but he did find a little gas, extending back ten or eleven feet from the face, and he put fire-marks in the room, one above the cross-cut in room eight and one below the last cross-cut on the right; that in the way business was conducted in that mine none of the coal-diggers who were killed in the explosion had any knowledge or means of knowledge

of those fire-marks or any business to go into room eight or make any inquiry with reference thereto; that the coal-diggers in the mine relied on the fire boss for their safety; that they had no knowledge or means of knowledge as to how he performed his duties as fire boss; that the men on his shift were out of the mine at the time he made his inspection and came in from a quarter after six and until seven o'clock, while he generally completed his inspection from ten minutes before six to a quarter after six, the inspection beginning part of the time at two o'clock, but usually from three thirty to four o'clock; that the only means the miners on his shift had of knowing how he performed his duties was that some of the men on the other shift saw him going around
64 some time before they went off, some of the night men being at work when he made his inspection as day fire boss and some of the day men at work when he made his inspection as night fire boss; that after placing a fire-mark in the mine he generally visited it and if he could remove the gas would do so; that he did not visit the fire-mark in room eight between Monday night and the explosion and did not remove that gas because there was nobody working there and he was crowded with his work; that he told Mr. Donohue that there was a little more gas than usual in room eight; that he was not in room eight until probably a week after the explosion; that at the time of the explosion he was home in bed asleep; that as soon as he heard of the explosion he came to the mine and went down with Mr. Brown, pit boss at the hard-coal mine, to the fifth left and came up through number one room to the fourth left air course and tried to get in there and encountered the water; that they then went back to the fifth left and up the slope to the fourth left entry and put a brattice across the slope turning the air into the fourth left entry; that he went into the water in the fourth left air course up to his armpits; that by means of brattice they carried the air into the fourth left entry until they got past the water and then went down into the back entry with the brattice and carried the air on until they got to the break-through in front of 16 room and there they could not move the after damp; that they crawled through the break-through up to the main entry and there found the first body of a man whom he
65 knew as Whitey; that the next body was found in sixteen room and that was the body of Mr. Speight, which was burned on the hands and arms; that about this time Superintendent Duggan came in and said that somebody was rapping at the face of fourteen room and witness with three others volunteered to go up there, but by mistake got into room thirteen and there found McCart's body, which was not bruised or burned, and they took it out and sent it up on top; that he then went back again and was overcome by the after damp and that was the last he knew at that time.

Upon cross-examination by Mr. Twitchell the witness further testified that he was thirty-three years old in February, 1895, that he had worked in mines in the Indian Territory, first at Savanah No. 1, which was a very gassy mine and in which he worked only as a

miner; that he worked at Krebs in the Indian Territory, the first mine in which he worked there being gassy but not very bad; that he was assistant fire boss in number seven at that place, between four and six months; that he was familiar with explosive gases and understood the duties of the fire boss; that he performed those duties as well as he knew how; that he understood that the safety of the lives of the people working in the White Ash mine was dependent upon the performance of his duty, and if there had been any danger threatening those lives which he knew he would have remedied it; that the last inspection he made of room eight was on Monday evening; that it was not part of his duty
66 to inspect and report as to the air circulation, but it was his duty to put up curtains so as to throw what air was coming around the faces where there was gas, and that he always performed that duty; that the brattices in the rooms were put up by setting props of from four to eight inches thick and tacking canvas to them, the canvas extending from just below the cross-cut through which the air traveled across the road and then turning at right angles and going up to a point as near the face of the room as would be necessary, sometimes within four or six feet; that on the day of this last inspection of the fourth left the brattices were in position as near as they could put them, that if a piece of brattice fell down the fire bosses were immediately sent for to come and hang it; that the miners would usually send by a driver; that the miners were cognizant that it was his duty when he discovered explosive gases to mark them with fire-marks; that some of the men on the opposite shift could generally see him in the performance of his work; that he did not remember whether he was in room eight once or twice on the morning prior to the explosion; that if he so testified before the coroner's jury, it was true, as his memory was fresh at that time; that at time of his last inspection he went into the first right entry, that is, he went into the first place that was working on the right side of the mine, but it will probably be called the second right entry although he might have called it the first right in his direct testimony; that he did not remember whether he was in the third or fourth right on his last inspection or not,
67 but the fifth and sixth he could not miss as he made it a point to inspect every place that was apt to make gas; that he did not remember whether he found gas in room sixteen or in room twelve or in any of the rooms on the fourth left; that after finishing his inspection he would go out on the main slope to the fire boss' cabin, and that the miners had orders to pass that cabin on their way to work, and if any one tried to go down the back slope without passing the cabin and he found it out, he sent him home; that as the miners came in he advised each man as to the condition of his working place; that if there was a little gas in a man's place he would give him a safety lamp, and if he thought there was too much for a man to go in that didn't understand his business, he would tell him to wait at the switch until he, the witness, came up; that there were more workings just prior to the explosion than when he first went on as fire boss; that it was on

Monday evening or Tuesday evening when he told Donohue that room eight was making more gas than usual; that Donohue was day pit boss and his body was found in the cross-cut at 11 room, but he did not see him until after they had taken him out; that his last inspection of room eight was on Monday night, and at that time the brattice and curtains were in position and the last post towards the face of the room was about fifteen feet from the face; that the gas was between that post and the face, and was directly in the air current and extended across the face of the room; that he put his fire-
mark eight, ten or twelve feet above the last cross-cut. The
68 witness here made a diagram of the room, which was marked
Defendant's "Exhibit C," and described the same to the jury, saying that brattice extended from the lower edge of the cross-cut from B to E across the road and then up within fifteen feet of the face to T; that he put one fire-mark above the cross-cut at Q R and one below the cross-cut at O P; that he could not say exactly what these marks were, but his custom was to make them with three or four crosses, the word fire and the date; that such a mark meant that men should not go into the place so marked, and that was the means adopted in the White Ash mine to indicate to everybody that they should not pass a given point, and that fact was known to everybody working in the mine; that in the main entries curtains were hung across the entry for the purpose of forcing air up around the faces of the room, sometimes two or three hundred feet apart and sometimes only fifty; that there were stoppings in the cross-cuts between the fourth left main and back entries up to the last cross-cut; that he had seen the pipe of the syphon in the fourth left back entry going around a sharp corner to go down the hill; that as well as he could remember the syphon ran down through number one room of the fifth left; that he did not know how far the pipe extended, but was once at its lower end after the explosion; that before the explosion he had nothing to do with the pipe and that it might have been running prior to the explosion so far as he knew; that the slant of the coal was twelve to fourteen
degrees and any water in the fourth left entry would
69 naturally run back into the air course and accumulate
on the lower side; that he never traveled that air course only up to this one point and back, and from the slant into the face; that after the last time he was in room eight other persons may have gone there so far as his knowledge was concerned; that he knew the water in the air course was in the neighborhood of two to three hundred feet in length; that none of the rooms opposite the place where the water was, were working at the time of the explosion; that he could not say in minutes how much it would have shortened his work in making the inspection if the water had been taken out, but he explained by the map that when he came up number one room of the fifth left in to the back entry of the fourth left, he went on until he came to the water and then took the back track and went through the trap door on the slant up to the main entry; that it was not altogether on that account that he asked Donohue for an assistant, but it was one of the things,—he had too

much work to do; that Donohue when he showed him over the mine didn't go all over the right side of the mine with him, but did go all over the left side except the old workings, but did not show him every place where the men worked; that he could not tell just where he was on the Tuesday night before the explosion at midnight or at two o'clock, but he usually had his supper about twelve o'clock and then went to the cabin and cleaned lamps; that he came off duty about two o'clock and went to bed as soon as he could; that he never informed miners of the general condition of the
70 mine, but always notified them of their own places; that when he quit working prior to the explosion he had fulfilled his entire duty as he understood it as a fire boss.

On redirect examination by Mr. Field, the witness further testified that after the mine was double shifted the mine was properly inspected as far as he could do it; that in parts of that mine shots were fired after he made his inspections and that he did not return to inspect those places after the firing because he did not have time; that the reason he asked for assistance was that he could not properly perform his duty within the time allowed; that it would have been his duty after he discovered the gas in room eight, to carry the brattice up near enough to the face to cause the air to carry the gas out, but he never had time to do it; that he marked room eight because he knew that the air would not carry the gas out without a change of the brattice; that when he reported the gas to Donohue, he and everybody else relied upon the fact that Donohue would not send anybody into that room with a naked light until after the gas had been removed; that in the way that mine was run he was not compelled to go back to room eight after he put the fire-mark there; that when he discovered the gas and put the fire-mark he hadn't exactly done his duty, but had done it as far as he could; that if the syphon pipe run before the explosion where it did after it, he would have seen it. The witness further testified, being asked as to his testimony before the coroner's jury, that it was true that
71 he found gas in room eight ten or eleven feet back from the face on Monday night, that he went through room eight on Monday night to make sure whether there was a chalk mark or dead line on it, that he never saw any such mark except the one he put on, and that he put one mark ten or twelve feet above the cross-cut and one down across the main road.

Upon recross-examination by Mr. Twitchell, the witness testified that he would not have allowed any of the miners to go to work if he had believed any portion of the mine was dangerous.

Upon further examination by Mr. Field the witness testified that it was possible and probable that there were dangers in that mine of which the men who went in knew nothing whatever, but that it was safe as long as they kept away from room eight; that it was not safe if the air was shut off in the fourth left air course; that if there was no air the gas in room eight was liable to extend all over the mine and that he knew nothing about it after Monday night.

On further cross-examination by Mr. Twitchell, the witness testified that if the air was not shut off in the back air course the

mine would have been safe; that if there had been sufficient air there, there would have been no gas; that gas is lighter than air and seeks the high places in the room; and before any gas could have filled room eight it would have spread through every room along the entire entry.

Upon further examination by Mr. Field, the witness testified that he could tell this gas when he saw it by which he meant that
72 he had seen it in a safety lamp or had seen the flame which it produces; that the gas might creep along the high place in a room from the face to the neck, and that it would always go to the highest point.

On further cross-examination by Mr. Twitchell, the witness testified that after the gas filled up to the cross-cut it would naturally leak out and go to another high place; that he did not know that it was possible to see the gas with a naked light although he had heard people say they could, but that he thought a man who would do it would want to commit suicide very quick.

And afterwards on further examination by Mr. Field, the same witness testified that he found in room twelve of the fourth left entry after the explosion a cartridge loaded up and filled with powder, between two and two and a half feet long; that it was made on a cartridge stick, a piece of wood two and a half or three feet long and about two and a half inches in thickness; that the paper was rolled on that stick and filled with powder and it was set up against the coal where they had a hole drilled to put this cartridge in; that at the time of the explosion four men were at work in the fifth left entry and none of them were injured.

On cross-examination by Mr. Twitchell, the witness further testified that he did not know the names of the men working in the fifth left entry, but one of them was called Matt; that the paper which surrounded the cartridge was pretty thick paper; that the cartridge was leaning against the coal at the face of room twelve; and that the cross-cut between twelve and thirteen was
73 fifteen or twenty feet from the face; and between twelve and eleven about the same distance from the face; that this was from four to six days after the explosion and before the coroner's jury went out, and at that time the air was circulating through that room and through thirteen, fourteen, fifteen and sixteen.

On further examination, by Mr. Field, the witness testified that there were men at work in the fourth left on the plane, who came out of the mine uninjured.

J. C. PORTERFIELD, being called by the plaintiff, was examined by Mr. Field, and testified that he was present when the witness Ray testified to his course through the mine, and following him made measurements on the plat showing the distance which Ray traveled, and that the distance was just one hundred feet more than four and three-quarter miles.

On cross-examination by Mr. Twitchell, he corrected this statement of the distance and said that it would be four miles and

two thousand and sixty feet or a little less than four and two-fifth miles.

Plaintiff offered in evidence a safety lamp which had been identified by the witness Ray as the kind of lamp to which he referred in his evidence, and the lamp was admitted in evidence as Exhibit B.

74 JAMES MERCHANT, being called as a witness for plaintiff, was examined by Mr. Field and testified that in February, 1895, he was employed in the White Ash mine as boss driver and was in the mine at the time of the explosion; that he had been working from about the first of April of the year before, and had been boss driver from the first of January of that year; that he had ceased to work for defendant on the 17th of March, 1896; that his duties were to oversee the drivers, see that the coal came out and see after the men; that empty cars were put on the empty track of the parting and the drivers hauled them in with mules into the rooms and brought out loaded cars and put them on the load track; that they put the empties on the lower track and took the loads out on the upper track; that the rope was the cable which ran from the top of the mine down to the bottom and hauled the coal out, and it was operated by a hoist engine at the top; that there were twenty-three men killed by the explosion in the fourth left and one in the third left; that there were mules killed also; that Henri Deserant and his two sons, Henri and Jules, were working in the fourth left entry and were killed; that he thought they were at work in sixteen room; that at the time of the explosion he was at the bottom of the mine and after the explosion he went up to the fourth left and met some men, among whom were John Densmore and Dan. Gorman, and Densmore told him that there was an explosion and said that the trapper boy was all shot to pieces and they got canvas and wrapped the boy up and sent him out of the mine; that
75 he then went and got a safety lamp and with Densmore, Murphy and Gorman tried to go in the main entry, and went in about as far as number twelve room; that they were compelled to turn back and tried to get in through the back entry and they came to the water there and could not wade through it; that they then turned back and went into the top entry again and followed that until they passed the water that lay in the bottom entry, and then went through a cross-cut back into the bottom entry and followed it as far as they could without being overcome by the after damp; that he waded into water up to his waist or a little deeper; that he could not tell how long it took after he came back out of the water to go beyond the place where the water was; that there wasn't any air there at that time unless it was through leakages; but there must have been some air because if there was none at all they could not have existed; that they bratticed the cross-cuts which had been blown out until they came to the inside cross-cut from the back to the main entry; that they took out some of the men, and then he got sick from the effects of the damp and went home; that his duties as to getting water out of the mine were

to see that the rope-riders hauled water when they had no coal to haul; that he was on the day shift; that the water from the fourth left air course when it ran through the syphon pipe, ran down through room one of the fifth left and through the parallel slope to the bottom of the mine; that he thought the double shift was put to work about the first of the year; that he did not know when
76 the water had run through the syphon pipe before the explosion; that to make the syphon run it was necessary to fill it with water and then the valves at both ends would be opened and the water would run out; that he did not remember ever having seen the book marked Exhibit "B;" that it was the business of the rope-rider and the rustlers who work with him to haul the water out of the mine, and they generally had a man for the purpose of filling the tanks at the bottom of the mine called the water-baler; that about the time of the explosion there was a water-baler on the night shift, but he did not remember seeing any on the day shift; that he saw evidences of explosion on the plane of the fourth left; that some of the bodies taken out were badly burned and some were bruised and the pit boss had his head crushed; that he saw one man who was not bruised much and that was Sam. James; that he saw a cartridge of powder standing at the face of twelve room; that his immediate superior was John Donohue who is dead, and Donohue's superior was the superintendent Duggan.

On cross-examination by Mr. Twitchell, the witness testified that after the explosion it took until some time late in the afternoon to get air to the face of the fourth left; that they did not run the air in all the way along the main entry; that they stopped the cross-cuts between the main and back entries with curtains; that the stoppings in these cross-cuts were crushed and busted open so the air went through them, but they were not blown clear back into the entry; that he traveled
77 nearly all the distance between the water and the face of the entry; that they carried the air through the inside cross-cut where the cross-cut was crushed down and broken, from the main to the back entry through the cross-cut inside of the water; that the air was forced in from the main slope; that he saw Mr. Duggan there that afternoon; that he thought that the entries were double-shifted most of the time; that there — more men working on the left side than on the right at the time of the explosion; that it was claimed by the people who hauled the water out that the right side produced the most water; that he did not remember how much water had been hauled out within a week or ten days prior to the explosion; that they had taken out of that mine as high as forty trips on one shift of ten hours and the trips averaged from eight to twelve cars; that he did not remember how many cars of coal were coming out of the left side at the time of the explosion; that he thought on the right side, only the second right was working; that he would be in the fourth left from four to eight times a day; that on the morning of the explosion he was not any further in the fourth left than the double parting at the slope; that he remembered twenty-three men being in the fourth left, but he did not re-

member how many were on the plane in the fourth left; that he generally came to work about half past six in the morning; that John Deighton was the fire boss that morning; that he went into the main entry first immediately after the explosion and did not at that time go into room eight; that there was a fall of rock in the entry near
78 room eight about four feet high; that the body of the first man taken out was of Mr. White, the entryman; that all the stoppings in the cross-cuts between the back and main entries were smashed down and the air had busted them out, and that he had so testified on a former trial; that those cross-cuts were the height of the coal, and the coal ran from five to seven and a half feet, and the cross-cuts were as wide as the entries more or less, and were thirty feet in length; that the stoppings were generally made by setting a row of props across the narrowest place in the cross-cut and nailing lumber to them to try to make it air-tight, and if there was any dirt or rubbish in the entry, that would be pitched in against them; that there was very little water coming out near the time of the explosion on his shift; that some of the water was taken from the bottom of the mine and some from the sump near the sixth right; that the water coming out of the fourth left back entry syphon ran to the foot of the main slope; that he was sure of that for the reason that they were not allowed to run that water down there for fear of drowning out the slope men; that he did not remember that that water crossed the track to the right side of the mine; that at the time of the explosion he knew about the water, and where it went, but had since forgotten; that he had a conversation with Mr. Duggan in the fourth left about hearing somebody rapping from the third left; that there was a sump on the right side where they filled the water into tanks with pipes, and that he believed it was between the sixth and seventh rights; that the
79 syphon pipe was a two-inch pipe; that if any man started the syphon to running, and he went by it or was anywhere near that pipe, he would know it was running, but if the pipe was started when he was in some other part of the mine, he would not know anything about it; that there was a door from the slope to the fourth left which was kept closed to force the air down the slope; that in some places in the mine there was canvas hung across the entries; that the slope was running just before the explosion.

Upon redirect examination by Mr. Field, the witness further testified that his orders were not to haul water when he could get coal; that immediately after the explosion they were going to take air down the slope and bring it up through the fifth on its regular course, and that he said that they could not do it, as he didn't think they could take it through that swamp of water, but before he got back to the slope this purpose was changed, and the air was taken into the fourth left in place of the fifth; that company men are men who work by the day under the orders of the pit boss, and the coal miners who were paid by the ton are not company men; that the lower end of the syphon pipe was on the fifth left main entry, and after the water emptied out of the pipe, it ran away by itself;

that he could not remember when he had seen indications of the water having run there before the explosion.

On further cross-examination by Mr. Twitchell, the witness testified that by throwing the curtain across the main slope,
80 relief would be had in the fourth left quicker than in any other way; that he did not remember whether the door was blown open or not when he took up the body of the boy; that when he got to the boy he was on the outside of the door; that the boy's place of work was on both sides of the door, according to whether the driver was inside or outside; that by putting the curtain across the slope, they would get all the air that came down except the leakage through and around the canvas; that they found smoke everywhere inside of the door; that by turning the entire air current into the entry, they would get air to the place where the men had been working quicker than by carrying it around through the back entry.

Upon further examination by Mr. Field, the witness testified that the proposition that stopping the air across the slope and turning it into the fourth left entry, was the quickest way to get the air in, was based upon the assumption that there was something wrong with the air course; that all he knew about the air course was that he knew how deep he waded in the water and he could not see that there was any way of getting through.

On further examination by Mr. Twitchell the witness testified that the object of taking the air into the fourth left entry after the explosion was to clear that entry of noxious gases and they took all the air that they could get and took it the shortest way there was, but that the easiest way would have been to carry it through the fifth left and then up through its regular course and the
81 reason they fetched the air in the way they did was because they could not get through the air course of the fourth left.

JAMES C. PORTERFIELD being recalled, was examined by Mr. Field, and testified that he was working in room number seven of the second left entry at the time of the explosion; that at some time within two hours he was at the syphon pipe and he helped to carry water for a little while; that he was pouring water in the standpipe of the syphon and others were carrying the water; that he had seen that pipe running before the explosion, but could not tell how long before; that after the explosion he was at the lower end and turned on the valve and the syphon started running; that the book marked Exhibit "B" was kept in the office for men to sign when they went to work for the company, and was always spoken of as the contract, but that he had never looked the book over.

Plaintiff then offered in evidence rule number seventeen as contained in the book Exhibit "B," which rule was read to the jury and is as follows:

17.—*Report Unsafe Places.*

All employés are requested to report any unsafe place to the mine boss, who shall at once have the same repaired, and permit no one to enter therein until it is put in proper condition.

Reckless persons or those having no knowledge of mining,
82 will not be permitted in the mines. The mine boss will personally examine the mine and know that all parts thereof are in a safe condition.

PHILIP ROLANDO, being sworn as a witness for plaintiff, was examined by Mr. Clancy, and testi- that he lived in Madrid and was rope-rider at the White Ash coal mine; that his duties were to run the cars into the mine and pull loads out and haul water; that the cars were taken in and out by means of a cable which was connected with a hoist-engine at the mouth of the slope; that the cable would run only when there were cars ready to be taken out and that he notified the engineer by ringing a bell; that there was a coupling on the end of the cable to couple to the end of the cars; that prior to the explosion he hauled coal and water out of the mine; that there were water cars for the purpose of hauling water; that there were three or four places from which he hauled water; that they were what was called number one sump, the second cross-cut below the sixth right, number two slump at the eight- right, the seventh left from which there was a little water hauled, and the foot of the slope; that as far as he could remember there had been a double shift at work in the mine for about a month before the explosion; that after the mine was double-shifted there was a great deal less water hauled than before; that after the mine was double-shifted his orders were to hoist water when he had no coal to take out.

83 Upon cross-examination by Mr. Twitchell, the witness further testified that there was water made on both sides of the mine; that he could not say how much water was taken out per day during January or during the last week of January or during the first, second or third week of February, but that he knew very little came out in that month; that he knew nothing about what was done on the other shift; that before the explosion there was some men working on the right side of the mine, but the great majority were working on the left side; that he could not tell how many cars of coal he would haul out on a shift and he never kept track of it and was not required to make any report of it.

J. W. BECK, being sworn as a witness for plaintiff, was examined by Mr. Field, and testified that he was a miner and was employed during February, 1895, in the White Ash mine as a coal miner and had been so employed from about the fourth or fifth of January of the same year; that there was no rule or custom of operating that mine whereby a dangerous body of gas was allowed to accumulate in any open place in that mine and remain for as long as thirty-six or forty-eight hours protected only by a firemark; that he had worked in other mines; that the coal-diggers

in that mine relied for their safety upon the management of the mine, the pit bosses and the fire bosses; that they had no means of knowing the condition of the mine except through the pit boss or fire boss; that when he went to work on the day of the explosion he had no knowledge or means of
84 knowledge of any dangerous body of gas in the mine or of the fact that the fourth left air course was obstructed by water; that on the 27th of February, 1895, at about eleven o'clock he was at work at the face of room fifteen in the third left entry, when suddenly there was a gush of wind and immediately after everything seemed to move apparently and a solid pressure came on them; that they were perfectly deaf for a time and could hear nothing at all, just as when one puts his fingers in his ears, and this lasted for a minute or a minute and a half; that the men who were working in the next room came in and asked him what in the name of God was the matter and he told them he thought it was an explosion and was afraid somebody was burned; that they ran down to the entry and found two mules and a trip of cars, but could not find the driver; that they turned towards the slope and went as far as room thirteen where they met the after damp which is a substance left in the air after a gas explosion; that they could not endure that and he told the boys that he was afraid that they were cut off from the slope; that they then went up — room thirteen and through the top break-through into room twelve and crossed that room and went to the break-through to eleven and there met the after damp and were compelled to turn back; that they then went back to the entry and down into the air course and turned towards the slope in the air course which they followed until they were about opposite thirteen room and there met the after damp again; that this satisfied him that they
85 were cut off completely and he told the boys that there was no hope unless a rescuing party rescued them; that Stoops and Nash asked him what in the name of God they could do, and he told them the only thing would be to stay with some water which they had met in the air course, but they objected to that and wanted to try to get out and insisted on going to the top entry again and taking a car off the trip, run it back — the entry and try to follow it to the door; that he told them that they could not do it, but they would try it anyhow and he went back with them; that they got the car off and started with it and went into the after damp about fifteen feet when the car struck a little pile of rock and went off the track and they fell on their knees coughing and gasping for breath; that his son who was working with him had followed them and he went down to-; that he caught him up and got him back out of the after damp and called to Stoops and Nash for them to come back, and he took the boy and the others followed and they went to the water again where they took buckets and sprayed the roof and stayed until they were rescued; that the spraying of the roof was to purify the air as much as they could; that they were in there from three to three and a half hours; that while part of them was spraying the roof the others were drumming on the brattice to at-

tract attention; that the mules were dead when they came out and he was told that the driver was picked up near room twelve, dead; that after damp is called choke damp by the miners and is a smoky, hazy kind of a fog, and the moment you get into it, it cuts your
86 breath from you, chokes you right down; that he had encountered after damp frequently before that time and had been working in gaseous mines for about twenty years before; that in the White Ash mine miners in the entries were allowed to fire shots at nine in the morning, at twelve noon and at three in the afternoon, and in the rooms at noon and night; that he had heard shots at nine o'clock on the morning of the explosion and he heard no other shots after the nine o'clock firing; that if there had been any shot fired in the fourth left entry or in any of its rooms he would have heard it, and there was not at the time of the explosion any noise or report such as accompanies the explosion of gunpowder.

Upon cross-examination by Mr. Twitchell, the witness testified that he had been working in gaseous mines ever since March, 1877; that he had been in mines when explosions occurred; that he had his hair singed by the burning of gas; that he had found gas in the White Ash mine and lit it; that he worked in only one place in the White Ash mine; that he knew none of the people working in the fourth left entry and never had been in that entry; that he was at the face of the room when the explosion occurred; that the room was canvassed up to within probably twenty feet of the face; that when he and the others were throwing the water up against the roof was opposite the mouth of fifteen room; that the water was probably two and a half or three feet deep and probably fifty feet in length.

87 Upon further examination by Mr. Field, the witness stated that he did not know of the water in the third left air course before he started to find his way out after the explosion.

Paul Wunschmann being sworn, was examined by Mr. Clancy and testified that his occupation was that of insurance agent and that in his business he had had occasion to familiarize himself with tables showing the expectation of life, and he produced copies of the American mortality tables, American Experience table of mortality and a table of life-annuity rates, and stated that these were in use by standard life insurance companies; that a person fifty-three years of age will live, according to the American mortality table, 18.79 years longer, and to buy for that length of time, an annuity of nine hundred dollars per year will require $11,094.30; that a person seventeen years of age, according to the same table, is expected to live 44.19 years longer, and the amount required to purchase an annuity for that length of time of six hundred dollars a year, is $11,263.80; that a person fifteen years old is expected to live forty-five and one-half years, and to buy an annuity of $450.00 for that time will require $8,563.05.

Plaintiff then offered in evidence the American Experience table of mortality which appears as table number 17 in a book entitled

"The Three Systems of Life Insurance," by Mervin Tabor, and also the table of life-annuity rates for males, which appears at pages 174 and 175 of a book entitled "Approximate Illustrations," printed for the use of agents of Mutual Life Insurance Company of New
88 York, which tables were admitted in evidence as Exhibits C and D, and of which so much as is material in this case is as follows:

EXHIBIT C.

Table No. 17, American Experience Table of Mortality.

Age.	Number living.	Deaths each yr.	Per ct. of deaths to the living.	Expectation of life.	Net premiums, American 4 per ct.	
					Level ann. prem. to insure $1,000 for life.	Natural prem. to insure $1,000 a year.
15	96,285	735	.007634	45.50	11.47	7.34
17	94,818	729	.007688	44.19	11.91	7.39
53	66,797	1,091	.016333	18.79	38.79	15.71

EXHIBIT D.

Life Annuity Rates—Males.

July 1, 1892.

Age last birthd'y.	Price of $100 annuity.			Annuity purchased by $1,000.		
	1 $100	2 $50	3 $25	4 Annual paym't.	5 Semi-an. paym't.	6 Quarterly paym't.
15.....	1,902.90	1,927.90	1,940.40	52.55	25.93	12.88
17.....	1,877.30	1,902.30	1,914.80	53.26	26.28	13.05
53.....	1,232.70	1,257.70	1,270.20	81.12	39.75	19.68

The witness further testified that he had examined the table of life annuities which appears in the printed rules of the supreme court of the Territory and had made calculations based on that table showing that it would take $9,908.10 to purchase an annuity of $900 for life for a man at the age of fifty-three, that it would
89 take $9,037.20 to purchase a life annuity of $600 for a man at the age of seventeen, and $6,811.65 to purchase a life annuity of $450 a year for a boy of fifteen years of age.

Plaintiff then offered in evidence the table of life annuity which appears at page 35 of the printed rules for practice in the district courts of this Territory, which was admitted as Exhibit E, and of which so much as is material to this case is as follows:

EXHIBIT E.

Life Annuities—First Payment Immediate.

Age.	Value.
15	$15,137
17	15,062
53	11,009

To ascertain the value of the annuity, calculate the interest on the principal at six per cent. for one year and multiply that amount by the value in the foregoing table set opposite the age of the person interested. If the first payment is to be made at the end of one year from the time the calculation is made, the value must be taken at one unit less than as given in the table.

On cross-examination by Mr. Twitchell, the witness testified that the purchase price of a life annuity of $150 for a man fifty-three years of age, would be $1,849.05, and of a life annuity of $100 at the same age, $1,232.70, and of a life annuity of $400 for a man at the age of seventeen, $7,509.20, and for an annuity of $100 at the age of seventeen, $1,877.30, and for an annuity of $100 at the age of fifteen, $1,902.90.

90 LINA KELLY, being sworn as a witness for plaintiff, was examined by Mr. Field and testified that she was the mother of Alejandro Kelly who was killed in the White Ash mine in February, 1895; that he had worked in that mine for two months and was twenty-seven years of age; that from the waist up his body was burned, both hands and both arms were burned; that on the right side of the head he had a large hole and on the left side of the forehead he had a hole about the center, and both legs were broken so that they were unable to dress him.

O. W. ALEXANDER, being sworn as a witness for plaintiff, was examined by Mr. Field and testified that he had lived at Cerrillos eighteen or nineteen years and was engaged in all kinds of mining, and had had seven or eight years' experience in operating coal mines; that he had been in coal mines two different times after explosions, the first time in 1875 in Iowa, and the second in 1895 in the White Ash mine which he visited as a coroner's juror investigating the cause of the deaths of twenty-four men who had been killed in the explosion of February 27, 1895; that he went into the mine as a member of that jury a few days after the explosion and went down the main slope to a set of entries they called number five and from there up into number four; that there were six jurors of whom he remembers three, himself, Mr. Green and Mr. Rogers, and they were conducted through the mine by Mr. Fletcher and Mr. Duggan and another person whose name he thought was Ray; that they
91 traversed the fourth left back entry until they came to an obstruction which was a body of water, which he tried to go through and waded in until the water began to run over the tops of his boots and estimated that he was not half through when he

turned and came out; that the boots were wading boots which came up twenty-six or twenty-seven inches; that at the point where he turned to come back the entry appeared about four feet wide at the top; that they then passed through the pillars to another entry parallel and passed along that entry until they reached another cross-cut or slant by which they went down to the back entry again and followed it to its end; that they then crossed through the pillar again and went into the last working room, from which they went to the adjoining room and continued their inspection from room to room until they arrived at room eight and then went out of the mine; that between room eight and the last working room he saw evidences of a terrific explosion, there being rags of canvas, pieces of rope, pieces of lumber, miners' tool boxes and tools and dinner pails in confusion as if thrown about violently by a great power, and also evidences of fire on posts and timber in the mine, charred bark on the timbers, and a strong smell of burnt rag and timbers; that from his experence and from what he saw at that time he could and did form an opinion as to the cause of that explosion and where it originated, and that opinion was that the explosion was caused by the ignition of fire-damp and that it originated in room number eight of the fourth left entry.

92 Upon cross-examination by Mr. Twitchell, the witness further testified that he had investigated the causes of gas explosion in a coal mine in the town of Boone in Iowa in the year 1875, and that at different times he had had occasion to investigate gases in other mines; that the gas which exploded in the White Ash mine was what is commonly called fire-damp, and that it was an explosion of fire-damp was shown by the tremendous force with which everything in that part of the mine had been thrown about, he previously knowing of the presence of fire-damp in that mine; that it was his judgment that it was impossible to have had any other kind of explosion in that entry except a gas explosion; that he knew before he went in there to make the inspection, that there had been an explosion of gas because he had viewed the remains of the men that were taken out; that it was about a year previous to the explosion that he had been in the White Ash mine; that he estimated the distance across the back entry at one place in particular, but that he could estimate pretty close and that he had a good eye; that he also estimated the height of the entry to be about six feet in the highest place and the width from nine to twelve feet on the bottom; that they went through every portion of the back entry except where the water was; that the air was passing through the air course and from the air course to the last cross-cut between the back and top entry; that he saw Mr. Fleming make a measurement of the air in the last cross-cut; that he went to the face of the fourth left entry and the air was being conducted up to

93 within a short distance of the face by means of curtains; that he did not know the number of the first rooms he went into, but he was in all of the rooms between room eight and the end of the entry; that they followed the course of the air through the rooms as far as room eight; that they had safety lamps, but he

made no inspection for gas; that the lamp already offered in evidence was a gauze safety lamp used for detecting the presence of gas, but not usually used by miners in their ordinary work; that the presence of gas could be detected by the lamp down to about four per cent. when a blue cap would form on top of the blaze in the lamp; that he made examination in room eight for evidences of an explosion below the face of the room; that the props were charred on the side toward room nine and slightly charred on the side toward room seven, but the main evidences of fire were on the side towards room nine; that he did not go up to the face room eight, but he did pass around the curtain taking no notice of the proximity of the face of the working; that in room nine they found canvas sprung and twisted around the timber; that he did not recollect any room that he went into where there were not curtains up to the face; that in room twelve the force of the explosion seemed to have been stronger; that to the best of his recollection the greatest force was spent in rooms sixteen and seventeen or fifteen and sixteen; that he saw no coal which had been coked; that when they went around the water some one remained at the south end of the pool with a light but he could not see the light directly over
94 the water, but only the reflection of the light on the water on account of the roof and the bottom of the entry forming a depression; that he found no evidences of exploded powder; that he found powder cans that were flattened up which might have been done by being thrown against a rib or against the timbers, but they did not show any evidence of having been exploded by powder from the inside; that he had worked in coal mines at Cerrillos, in his own mine more than anybody else's, but he had never worked in a mine there ventilated by a fan; that he had done but little work for the defendant and that only in the capacity of a contractor at the coke oven.

JAMES DUGGAN being sworn as a witness for plaintiff, was examined by Mr. Field, and testified that after the explosion and until the coroner's jury went into the mine he was in charge of the property and that he and the other agents and servants of the defendant excluded all other persons therefrom; that there was an interval of four days between the explosion and the going down of the coroner's jury, which went down on the fourth of March; that with the coroner's jury there went down Mr. Fletcher, Fleming, Alexander, Leaden, Rogers, Green, and himself, and that he did not remember the names of the others.

Counsel for plaintiff then proceeded to read under agreement with counsel for defendant, the evidence of THOMAS LEADEN,
95 who had testified as a witness for plaintiff on a former trial of this cause, on which former trial, being examined by Mr. Field, the said witness testified that he lived two miles north from Gallup and had been a coal miner about nineteen years; that in February, 1895, he was a member of the legislature at Santa Fé and was appointed as a member of a committee to investigate the

cause of the White Ash Mine disaster; that he had previously worked in that mine and was familiar with its underground workings as far as they had gone when he worked there, and he then proceeded to make a diagram on a blackboard of the underground workings of that mine so far as he was familiar with them and particularly of the fourth left entry. The witness further testified that he worked in that mine from May to August, 1893, and then went to the opening of the Cherokee strip and afterwards returned; that he then started to work in the fourth right and drove a slant and then went to work on the driving of the slope air courses on the left side of the slope and the fourth left entry was driven about thirty feet and was full of water; that he worked until about the twenty-third of January, 1894; that the mine was supplied with air by a fan; that the air comes down the slope and continues to the bottom where it splits part going to the right and part to the left, when it comes back and returns by the slope parallel through the works below the fifth and then up to the fifth left air course; that the slope is the main opening in which there is a track to hoist the coal out of the mine in cars, and the slope par-
allel or slope air course is driven along with the slope
96 for ventilation, and about every two hundred and fifty or
three hundred feet entries are driven, and one air course with each entry to carry air, the air being necessary for the men to live and to keep gases out. The witness then proceeded to explain the diagram which he had made on the blackboard, which explanation is omitted, the diagram not having been preserved. The witness further testified that when he went into the mine with the coroner's inquest, it must have been five or six days after the explosion; that they went to the bottom of the slope and came up through a room to the fourth left air course, and in that room they could see where water ran down and there were timbers, ties and things lying in the air course, washed down by the water, and they went along the air course about a hundred and fifty feet until they came to the water; that there was water in the air course through which they did not go, but some of the persons waded into the water up to their boot tops and then they went around; that one man stayed on this side and shined a light and they could look across the water and see the light, which he judged to be about three hundred feet distant; that there was a water mark on the low side of the air course which showed where the water had been, and was all along the low side of the air course about three inches from the roof; that the air course was from five to five and a half feet high, and about nine feet wide, except at the fault, where it was about six feet; that he went into room eighteen and then through all the rooms,
one cross cut to another, as far as room eight, and then they came
97 down out of eight and went into another room and then
came out through the entry to the main slope and went upon top; that the filling of the air course with water was what caused the accident; that the water extended for five or six hundred feet and it seemed to be all one body of water; that the water which they could not get past was about three hundred feet long, but there

was water laying back on the low side; that there was a fault in the air course which made a sag in both the top and bottom of the air course; that after he went into the mine after the explosion, Fletcher, Duggan, Brown and the coroner's jury went in; that there were six of the jury whom he remembered, Alexander, Rogers, Miller and Green, and Kinsell, the justice of the peace, also went in; that Fletcher was inspector of mines for the Santa Fé company; that he met at bottom Archie Chambers, the fire boss; that Brown had charge of the mine at the time of the examination and before the explosion he was boss of the hard-coal mine; that they came down to the second left to the fire station, where Mr. Brown gave them all lamps, and they went down to the fifth left and went through the door and up through a room into the fourth left air course, and he went back along the air course about a hundred and fifty feet to the water, and Alexander walked into the water to the tops of his boots, and then they returned and went up into the fourth left entry and went past the water and came down in the air course and Chambers held a light on this side and they saw the light across the water; that where Alexander went in it was about three and a half feet from his boots to the top;
98 that as Alexander waded in the water it was bound to get deeper as it was a natural swamp and he was on the upper edge; that after they looked across the water they went up into the main entry and some of the party went to the face of the entry, and he went into room eighteen, where there was a machine with which men had been drilling a hole, and then he came out of that room and saw other parties in the entry, which was driven on further ahead, and then they came back and went through all the rooms as far as room eight; that there was no other air course to supply air to the fourth left entry and the rooms on that entry; except the fourth left air course, but there might be leakage through some of the stoppings, and there would be more or less, but the main air came through the air course; that if the fourth left air course got filled with water there would not be any air to get into the entry, except what would leak through the break-throughs; that Fletcher or Duggan or Brown, said that they found the body of a boy at the door, and some of them said it was between the door and the slope, and Mr. Fleming took notes of where the bodies were found; that Brown said Roy Phillips was found in room eighteen; that he knew that fire-damp would burn one if it would explode, and he knew there was gas on the left side of the mine because there was gas in the first left entry when he was driving it, and there was gas in the slope air course when he was driving that; that when he worked in the fourth left it was started off the slope a short way, and he drove it about forty feet further
99 down and then drove the parallel of the slope back up the hill; that the fourth left entry came down on a slant so that the trip could come in; that the trip is ten or twelve cars, which hold about a ton and a half; that while he was at work there, they had water because they were driving down a pitch, and the water

would naturally run there; that he drove that slant down about eighty or ninety feet.

Upon cross-examination by Mr. Twitchell, the witness testified that the length of water in the air course was three hundred feet on the high side, but more on the low side; that the air came in at the mouth of the slope and split at the foot of the slope, one-half going to the right and one-half to the left, as near as they could get it, and then the air returns in the way he had pointed out and supplied the men and animals working on each level; that the air must be supplied to people at the face of the entry before it could be supplied to the men working on the plane on the fourth left, if it were going its right course, and after supplying the men on the plane, the air went to the men on the third left entry; that if the stoppings and brattices along the course of the air were in proper condition, the necessary amount of air would be carried from the fourth left air course, but there would always be some leakage; that if the fourth left air course became full of water or nearly full, that would have a tendency to make the leakage back through the canvas and the cross-cuts on the outside of the water all the greater and by this means air might reach people working on the second left at the time of the ex-
100 plosion; that it would be impossible for the air to escape through the stoppings if they were built with brick and mortar, but if built with refuse out of the mine it would be impossible almost to make them air-tight; that the air in its course through the left side of the mine, if everything was in good condition, would gather up all the impurities and gases in its course, and the air in the second left air course would have more impurities than it would on the fourth left air course, because it has a longer road to travel and picks up the impurities as it travels; that air following the suction caused by an exhaust fan will take the shortest course, and the air coming up into the fourth left air course would certainly travel to the face of the fourth left entry as long as there was not some obstruction in the air course; that the White Ash mine was what would be called a wet mine; that all of the works of the mine are not wet, but there is considerable water in the mine; that the map which he made was made from what he saw of the fourth left in traveling through it after the explosion and that they were down in the mine about three hours.

Upon redirect examination by Mr. Field, the witness testified that the stoppings were not in what he would call good condition at the time he worked in the mine; that if at the time the explosion occurred there had been no obstruction whatever in the air course the effect of the explosion would have continued on down to the levels below, because when the explosion occurred it flew against the air; that it had to fly against the air to allow it
101 to explode, and in his experience when explosions start they always fly against the air; that the explosion occurred in the fourth left and flew against the air and encountering the water blew out the stoppings, but if the obstruction had not been there it would have gone down to the fifth or sixth before it got out on the

slope, and if the after damp killed a man and two mules in the third left entry and did no damage to men or animals below the fourth left entry, that fact indicated an obstruction in the fourth left air course at the time of the explosion.

Upon recross-examination by Mr. Twitchell, the witness further testified that the explosion didn't reach the third left entry; that there was not any obstruction in the rooms between room eight and the rooms on the plane of the fourth left, but the explosion would naturally fly against the air and it would be coming with the air if it flew back that way; that the explosion started in room eight and flew back through all the cross-cuts, and they found burnt props showing it flew back that way to where the air was coming; that if there was an obstruction in the fourth left air course, it would cause some of the air to leak through the stoppings, and it would come through on the plane and never reach where the explosion started in room eight.

Counsel for plaintiff also read under the same agreement with counsel for defendant the further evidence of the said THOMAS LEADEN testifying as a witness for plaintiff in rebuttal on the said former trial of this cause, on which former trial
102 being examined by Mr. Field, the said witness further testified that he had had considerable experience in exploded mines, that he had been engaged in rescuing parties that had been killed in the Savannah explosion in the Indian Territory about the year 1887, and that he had had experience in explosions at Rich Hill, Missouri; that in his examination of the fourth left entry of the White Ash mine, he examined the air course and found water there and went to the face of the entry, and examined the rooms, tracing the course of the explosion; that they started at about room number eighteen, but he did not go to the face of the entry; that they examined all the rooms from eighteen to the cross-cut between seven and eight and saw some holes drilled that had not been fired and found no shots that had been fired that left any holes; that there was one shot in room eighteen where there was about four or five inches of the hole left; that they examined the props along the course of the explosion where the flames had come and they found some of them burned all around, and they found props burned all along where the flame came through the cross-cuts, up to room eight; that in some of the rooms the props were not burned at the face, but were burned a little way above the cross-cut where the main course of the explosion went, and in number eight they were burned above the cross-cut about fifty feet; that from his experience and examination he was able to express an opinion as to the cause of the explosion and where it originated, and that it originated in room number eight where the gas
103 was lighted by a naked lamp by a man that went up the room; that he knew what a gunning shot or a windy shot was; that there is a difference between a gunning shot and a windy shot; that a gunning shot blows the tamping out and a windy shot is one that creates a terrible wind in the mine; that he found no indication that there had been a gunning shot in the fourth left

entry; that a windy shot would make a noise that makes a concussion in the air, makes the air wave backward and forward, while a gunning shot sometimes makes a sharp and loud report, sometimes louder than the reports of ordinary shots; that a gas explosion does not make a loud noise; that if the explosion had been occasioned by a gunning shot, the report of the gunning shot would have been loud, but if it was just a gas explosion it woutd be a kind of a dead sound; that when the force of the explosion started back it displaced the air and had to get out the best way it could; that there was no trace of any flame from room number eight towards the slope.

Upon cross-examination by Mr. Twitchell, the witness further testified that there was no indication of flame on the side of room eight towards the slope; that he examined the face of number eight, and there was indication of flame for about fifty feet from the last cross-cut up towards the face; that is was more than fifty feet from that cross-cut to the face; that if there was a body of gas in room eight it was against the face; that he examined all of the
props in room eight for more than fifty feet above the
104 cross-cut and there was scorch on the props on the side
towards the slope; that the only place where he examined the coal on the side of room eight towards the slope was at the cross-cut leading into room seven; that the flame extended in room eight below the cross-cut about twenty-five feet, that is the props were burned, but it did not extend to the entry as it would have had to go about one hundred and twenty-five feet to get there; that there was indication of flame in rooms eighteen, seventeen, eight, fifteen, twelve, eleven and ten, but there was no indication of flame at the neck of room eight; that the force of the explosion did not go to the plane instead of to the face of the entry because it was a gas explosion which goes against the air, and there must have been some air coming around in the direction of room eight; that there certainly is flame when there is a gas explosion; that he never heard of choke-damp exploding; that he saw Fleming take his instrument to take the measurement of the air, but he, witness, went on when Fleming stopped to take the measurement.

On redirect examination by Mr. Field, the witness further testified that the flame did not go up against the face of room eight because the gas had accumulated and came down and there wasn't very much air going into room eight and it wasn't enough for the gas to burn and when it was lighted it flew out and didn't go up to the face of the room.

Upon recross-examination by Mr. Twitchell, the witness further
testified that there was a large body of gas in room eight in
105 his opinion and it laid on the outer edge of the air, and it
burned until it burned all the air of the room and it didn't reach the face, and the gas flew to the air, and flew out of there and back to the face of the entry through the cross-entries.

(This closes plaintiff's case.)

Mr. FIELD: That is the case for the plaintiff.

JOSEPH FLETCHER, being called and sworn as a witness for the defendant, testifies as follows:

By Mr. TWITCHELL:

Q. State your name, age, and occupation.
A. Joseph Fletcher; age 42; occupation, mine superintendent and inspector.
Q. In whose employ are you now?
A. Charles J. Devlin's.
Q. Where are you employed and in what capacity?
A. In Frontenac, Crawford county, Kansas; acting superintendent or superintendent.
Q. Superintendent of what?
A. Frontenac and Chicopee property.
Q. What kind of properties are they?
A. Coal properties.
Q. About how many men have you engaged under you?
A. From 700 to 800.
106 Q. How many years have you been engaged with coal mines?
A. About 32 years.
Q. Where have you been employed and in what capacity during that time?
A. Well, I started as a boy in Europe. Came to this country and worked in Illinois, Iowa, through Missouri, Kansas, Colorado, New Mexico, also Arizona.
Q. Do you know the Cerrillos coal fields, Mr. Fletcher?
A. Yes, sir.
Q. When did you first know the Cerrillos coal fields?
A. It would be about '92, I should judge.
Q. What was your connection with them at that time?
A. I was mine inspector for the Santa Fé system.
Q. Well, do you know a mine at Madrid near Cerrillos called the White Ash mine?
A. Yes, sir.
Q. When did you first know that property, Mr. Fletcher?
A. In '92, these openings were opened there, in operation rather.
Q. Did you make an inspection of that mine at that time?

Mr. FIELD: Objected to as immaterial, irrelevant and incompetent.

Objection withdrawn.

107 A. I inspected all the properties that were in operation in Cerrillos and up in the Madrid district at that time.
Q. How long at that time had you been a mine inspector for the Santa Fé company?
A. I had been about three years previous to that.
Q. Now what various positions have you held in your connection with coal mines?
A. Well, from trapper, driver, miner, mine foreman, mine superintendent, and mine inspector.

Q. State whether or not from your experience with coal mines, as trapper, driver, miner, inspector and superintendent, and the other positions you have held and occupied, you are competent to give an opinion as to the causes of an explosion.

A. Yes, sir.

Q. Where were you on the 27th day of February, 1895?

A. Topeka, Kansas.

Q. How long after the 27th day of February, 1895, were you in Cerrillos or Madrid, if you were there?

A. I got to Madrid as quick as steam could carry me.

Q. What day did you arrive at Madrid?

A. I think it was Friday following the explosion.

Q. Well, when you got there what, if anything, did you do with reference to the inspection of the White Ash mine?

A. Well, I arrived there at night; next morning I went into the mine.

108 Q. Now, state what you did when you went into the mine on that morning and what you found.

A. Well, I secured a lamp, that is a safety lamp; I started down the mine alone and reached the 4th left. There was a curtain hanging across the main entry or main slope, which was acting as a regulator, had been acting as a regulator——

Mr. FIELD: Object to the testimony of the witness as to what the curtain had been doing.

The COURT: The witness may confine himself when he went in to what he saw, as to that particular question.

Q. Go ahead and state what you did when you went in and what you found?

A. I went through the door on the 4th left and reached as far as either 12 or 14 room, 14, I think, but hearing — I halloaed "Brown," who I was informed was in charge, but I got no answer, and knowing that they were putting up brattice and repairing stoppings, I didn't know just how they were about the air course and returned back to the main slope. I stayed there a few minutes and made up my mind I would go in as I knew they were in the inside; I started in and reached No. 16 room, now I think it was 14—it was 16 room, I think—and heard the men working; I went up the room where the parties were; that is, I think, Mr. Brown and Mr. Chambers and Mr. Ray and Deighton and Merchant—I think Merchant was there. I examined the place; saw that they were putting up the brattice and then returned down the room with Mr. Brown.

Q. Down 16 room?

109 A. Yes.

Q. Did you make an inspection of 16 room at that time?

A. No, sir, not at that time as the brattice was not up to the face.

Q. Tell exactly what you did do.

A. We came down onto the fourth left entry and went right into the face of the mine; we examined the places there and found that there was nothing in there, that is gas. I came out and came on

top. I think in the afternoon—this was in the forenoon; after dinner I went down again and they had got back somewhere to about 12 room, canvassed back. I went through the rooms on the inside with Mr. Brown. There was a car off the track on this side of the cross-cut between the 3d and 4th left, or it was the last cross-cut at the face; I went up into 18 room, I think 18 just had its neck turned but had no cross-cut in the room 17. I came down and went up 17 and there was a shot that had been fired there. I examined closely in that room. Now I think it was either 17 or 18, I would not swear positively, but there was a shot there in the bottom of the hole, it had been left in there, there was very little coal in the room; there was a cross-cut between 17 and 16 and we went up to the face of 16 and came back. We went into 15 and came back to the cross-cuts. We went into 12 and came back through the cross-cut. I went up that afternoon and I went down. I think it was the following Monday. Now, if the men were
110 working on Sunday I was down Sunday. I was down every day up to the time I was called for the inquest.

Q. Did you attend the coroner's inquest?

A. Yes.

Q. Did you go into the mine with the coroner's jury?

A. Yes.

Q. What time of the day did you go into the mine with the coroner's jury and who were with you?

A. It was in a forenoon. I could not exactly state the time, but there was Mr. Brown, Mr. Duggan, Mr. Leaden, and myself, and Mr. Rogers, who was a juror, and Mr. Alexander and Mr. Green, Mr. Miller, and some other gentleman that I didn't know that was taken a little sick. He didn't go around all the time I did. Also Mr. Fleming, who is territorial mine inspector.

Q. Tell the jury just exactly what you did when you went down with the coroner's jury and what you found, what evidences of explosion, if any, you found in any part of the 4th left entry or in any of the rooms and all about your actions and inspections on that day with that party.

A. We started into the mine together at or near the overcast. Mr. Fleming took the air current that morning.

Q. Point out on the map, Mr. Fletcher, just where he took that first measurement.

A. It was at this point (indicating the overcast).

Q. Tell the jury just how Mr. Fleming took the air meas-
111 urement at that point. Describe it minutely to the jury so that each one of them will understand it?

A. Well, he has an instrument called the anemometer, which has figures around the face like a watch face or clock face and there are fins similar to a little fan which held against the current, with its face towards the current, the action of the air circulates the fins and every time these turn *or* it makes a revolution or counts one on the dial which is a cubic foot. If the anemometer should read 100 revolutions and the area should be 70 feet that is the superficial feet of the slope, why it would be 7,000 feet that was traveling. If it

would register 1,000 it would be 70,000. We went on down the slope until we came about the point of the 6th right where he took another reading. Then we went into the 6th, that is, in the 6th left, we came up this plane, came up through this cross-cut went right along this face, came back around the 5th, came up through here on the back slope, left back slope, or No. 1 rather, it was at that time, into the 4th back entry. We took a reading in the back slope between the 5th and 4th.

Q. Do you know how much that was?

Objected to.

Q. Who took the reading, you and Mr. Fleming, or Mr. Fleming by himself?

A. Mr. Fleming held the anemometer, I held the watch, also Mr. Porterfield, I think was with us.

Q. Do you know what the air reading was there at that time?

A. I could not tell you.

112 Q. Have you got a memorandum of it?

A. I haven't, but Mr. Duggan should have.

Q. Did you make a memorandum of it at the time?

A. I did, I figured the cubic contents at the times he gave me the reading, but I have the paper.

Q. Did you give it to Mr. Duggan, or what did you do with it?

A. It may be with my own papers. We came into the 4th left back entry and we took a reading again in the back entry. I recollect the reading that was made there within a few feet of it at the 4th left back entry, just about 12 feet from where room No. 1 connected with the 4th left back entry.

Q. Room No. 1 of the 5th?

A. Yes, sir.

Q. How much was that reading?

A. She was somewhere between 4,700 and 4,900 feet, between 4,000 and 5,000 feet. We started on to where there was a little depression in the entry. There was a little water. There was some of the jurors, one or two of them started, went in, the others made remarks that they would not walk through. We turned back and went through a cross-cut on to the 3d. Then we took the 3d main cross-entry, I think it was the second cross-cut inside of the hauling cross-cut to the back entry. I can explain it a little more plainer. Here is the hauling cross-cut that they use to haul the coal out on, when the back entry was driven.

Q. What they called "a slant," wasn't it?

113 A. Yes, sir. When we went through the cross-cut on the inside, the 2d cross cut we turned and came back to this water edge. We left a man on the opposite side to prove to these fellows that the air course was opened, so that he could hold his light. We saw the light from the inside where the water was in the back entry. I think Mr. Alexander was the man that went in on both ends. We then took the back entry right clear through to the last cross cut. Then we took a reading at the last cross-cut.

Q. Just a moment before that reading in the last cross-cut. Tell

the jury, Mr. Fletcher, what was the condition of the stoppings in the cross-cuts or brattice in the cross-cuts between the main and back entries of the 4th left at the time that you were in there with the coroner's jury. The stoppings that had been there prior to the explosion, I mean.

A. They had all been blown out down on to the 3d or on to the back entry. On the 4th left there was cans, debris, props all scattered along the entry. There was also other little depressions going in as we went in through the entry where there was a little water standing, say from 6 to 8 inches deep. These cross-cuts had not been repaired at this time.

Q. What had been put up there in order to take the air up to the face?

A. Canvas.

Q. Now, before we go any further, I want to dispose of that part of the case. Were you familiar with the stoppings between
114 the main and back entries of the 4th left as they existed prior to the explosion?

A. Yes.

Q. Using the map, tell the jury how many of these stoppings there were?

A. Well, there was one, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21.

Q. Prior to the explosion, do you know whether or not all of these cross-cuts were closed up except the last one at the face of the entry?

A. Yes; they generally were.

Q. What was the character now of the stoppings in these cross-cuts?

A. Well, they generally make a little cutting in each side of the rib or each side of the cross-cut in the center of the cross-cut. They would set three props, one on each side and generally one in the middle that would be from top to bottom.

Q. On one side or both sides?

A. If they put the props on the lower side they would nail a board on the other side. They would cut the coal even. Then all the cross-cuts were filled up with dirt on both sides of the wood brattice.

Q. Now how long were each one of the cross-cuts, that is, what was the distance between the main and back entries?

A. I think she is a 30-foot pillar, if I am not mistaken.

Q. What was the width of the cross-cut?

115 A. Well, she was driven 8 feet wide and the thickness of the coal, 6 x 8; if it was seven, it would be 7 x 8.

Q. At the time you went down there with the coroner's jury and the time prior to your going there with the coroner's jury, state what had become of these stoppings which were in these cross-cuts.

A. These stoppings were all blown down from the 4th left into the 3d left back entry.

Q. Do you mean the 4th left back entry?

A. I mean from the 4th——

Mr. FIELD: Object to the gentleman leading the witness.

A. From the 4th left front entry into the 4th left back entry, that is what I meant.

Q. Now, you can state to the jury whether you were familiar with the 4th left back entry and the 4th left main entry at the time it was being driven.

A. Yes. Had been through it a great many times, in fact every time I visited the mines there I went through them.

Q. State or tell the jury what was the size, the dimensions of the 4th left back entry?

A. I think they were driven 9 feet wide and the thickness of the coal; sometimes they would be wider, and sometimes a little smaller, but generally used to drive them wider on account of the coal, the miner was benefitted by it.

Q. How was the coal hauled out of the 4th left back entry when it was being driven?

A. This is the main slope (referring to the map); this is
116 where the rope runs in on to the parting; the rope is run down to this point, that would be the 4th left back-entry point from where she turns at right angles to the slope; while they were driving it the main slope would lift a load from that point, and this back entry was developed, every so far they put in cross-cuts, and every so far, that is three or four cross-cuts, they put in an angle cross-cut or slant. Now, then the back-entry man when driving, he would deliver his load through the angle cross-cut, or the driver, rather, and he would deliver it on to the parting by a mule, and as she developed they would keep on putting on these angle cross-cuts.

Q. Now during the time that this back entry was being driven and the work performed which you have just described, tell the jury how the air was conducted up to the face of the back entry.

A. Well, she would come through the cross-cut, that would be the distance of the development at that time; when she was turned, she would come down the main slope through the first cross-cut below the 4th left back entry. She would come up the back-entry slope; she would then take the 4th left back entry to the last cross-cut which was holed between it and the back entry and then finish at the rooms that were turned and return to the plane.

Q. How would the air be conducted up to the face of the back entry after it had come to the last cross-cut?

A. There was a brattice generally used which would be on the high side of the entry; the air would come in on the low
117 side; if they had the brattice in 3 feet, 5 feet, 10 feet, she would come to the face and then return back on the brattice to the cross-cut.

Q. Tell me what means were used for hauling the coal out of the 4th left back entry?

A. Well, it was by men driving. There was a "T" iron track

there and mine cars, which came up the main slope and went in there.

Q. What was the size of these cars?

A. Well, they would hold from 2,500 to 3,000 pounds of coal.

Q. What was their dimensions?

A. I could not just describe the dimensions, Mr. Twitchell.

Q. Well, how were the cars hauled out of there?

A By mules.

Q. Mules would be driven clear up into the entry, would they, for the purpose of hauling out these cars?

A. Yes, sir.

Q. And that was the means used during the entire time when the 4th left back entry was being driven, was it?

A. Yes, sir. It takes a good mule to pull up this slant, a large one.

Q. What size mule would be driven through that dimensions?

A. 16 hands.

Q. I believe you have stated, Mr. Fletcher, that all of these stoppings were blown into the back entry at the time you went in there with the coroner's jury. Give to the jury, if you can, approxi-
118 mately the cubical contents of the average one of these stoppings, between the 4th left main entry and the 4th left back entry?

A. Well, it would be, if it is 6 feet high or 7 feet, or 8 feet wide or 9 feet wide, at the time, that would be, we will estimate it 6 x 9 equal 54 multiplied by the pillar would give you the cubical contents for one stopping:

Q. Do you mean to say that these stoppings filled up the entire cross-cut between the main and back entries?

A. They were generally loaded full.

Q. Now, you can tell the jury, if you can, what was the air measurement made by yourself and Mr. Fleming at the last cross-cut on the 4th left back entry at the time you were there with the coroner's jury?

A. It was 4,900 cubic feet a minute.

Q. How many cubic feet of air, Mr. Fletcher, was necessary in that part of the mine to sustain 24 people and to drive out any gases or impurities accumulating in the 4th left entry or any of the rooms turned off of it which were then in operation, that is, prior to the explosion?

A. Angle room No. 8, it would be 1,584 cubic feet per minute, for the 24 men, assuming 66 cubic feet per man per minute.

Mr. FIELD: Object to it and move to strike out the answer because the assumption is utterly unauthorized.

Q. How many cubic feet of air per minute is necessary for one man in the mine?

A. 66.

119 Q. Then how much air is necessary for 24 men?

A. 1,584.

Q. Did you follow along the air current at the time you were

there with the coroner's jury from the last cross-cut between the main and back entries to a point beyond room 8?

A. I led the jury there mostly all the time.

Q. Did you follow the air current from this point to a point beyond room 8?

Mr. FIELD: Objected to as leading.

Q. What did you do after you took this measurement with Mr. Fleming at the last cross cut between the main and back entries off the 4th left; state whether or not you followed the air current in its course through the rooms turned off of the 4th left entry?

A. Yes, we did.

Q. Well, in doing so, did you pass beyond room 8 or not?

A. I went into the cross cut between No. 8 and No. 7.

Q. State whether or not, Mr. Fletcher, at the time you were there with the jury and when you were in the cross-cut between rooms 7 and 8, the air current was such as would dispel or drive out any explosive gases which from your knowledge of that property were accustomed to be generated at any place along that air current?

A. Yes, I was in there with a naked light the following Monday——

120 Mr. FIELD: I ask to strike out the latter part of witness's answer because it is not responsive and it does not follow logically.

Mr. TWITCHELL: I don't object to its being withdrawn.

The COURT: Gentlemen of the jury, that part of the answer as follows: "I was there, in there with a naked light the following Monday," is withdrawn, it is not before you in evidence and you will not consider it at this time.

Q. Mr. Fletcher, tell the jury now, what evidences of explosion, if any, you found at the face of the 4th left main entry.

A. I found coke on the end of a car which had been blown off the track; it was about an inch thick.

Mr. FIELD: At the face of the 4th left main entry?

A. It was at the upper side of the last cross-cut between the 4th left main and the 4th left back entry.

Mr. FIELD: Object to the answer of the witness and ask that it be taken from the jury because it is not responsive.

The COURT: Gentlemen of the jury, the answer of the witness as follows: "Well, I found coke on the end of a car which had been blown off the track; it was about an inch thick," is withdrawn and it is not before you in evidence and you will not so consider it.

Q. What evidence of explosion did you find up at the face of the 4th left main entry?

A. Found the canvas blown down.

121 Q. What else did you find in that immediate vicinity, if anything?

A. At room 14 or it would be at room 15, I think, there was a powder keg on this side of the first cross-cut going up the room

which was spread open; there was also one about the mouth of the room; there was two, I think, between that and 16 room, and there was either two or three on the car, inside of the car.

Q. What car was this?

A. That was a car of coal which sat on the track.

Q. On what track? In the entry or in the room?

A. In the entry.

Q. Was the car on the track when you discovered it, or off the track?

A. It was off the track.

Q. What evidences of explosion, of flame or fire did you find about this car?

A. I found coke on the back end of the car about an inch thick.

Q. In which direction would the back end of that car be with reference to the current of air passing through the air course, be against it or with it?

A. No. 17 room where the cross-cut came through 16 and 17, the face of 17 room was almost opposite the cross-cut, the current passed by the car through the cross-cut.

Q. And not against it?

A. No, sir.

122 Q. Well, what other evidences of explosion and fire and flame did you find in that vicinity besides this coke which you found on this car?

A. Props were charred.

Q. How in your opinion, Mr. Fletcher, was that coke formed upon that car?

A. Well, from the dust which would be carried with the flame, the particles would be coked traveling with the flame and whatever it came in contact with it would adhere to, it would lodge on.

Q. Did you examine the props in 17 room and in 16 room?

A. I don't think there was any props in 17 but I examined all the props from 16 out to No. 8.

Q. Now, tell the jury just exactly in what condition were those props with reference to flame and evidences of explosion and fire.

A. As we passed room 16 through the last cross-cut the flame, the props were charred on the side traveling outwards and as you would go up into where the face of the room was it would be charred up to the face of the room. If there was two cross-cuts she would go up to the two cross-cuts very often; she would go through into the next room and char the prop and return down to the cross cut or up, if the cross-cut were above, the inside cross-cut; she would go up or down whichever it might be. Right back at No. 9 or No. 10 were the same way. No. 8 had two cross-cuts. I was up through that to the face of the room. Their props above the cross-cut were not charred at all.

Q. In what room was this, Mr. Fletcher?

A. In room No. 8.

123 Q. The props above the cross-cut were not charred?

A. No, sir, the props were not charred above the cross-cut; I drew Mr. Leaden's attention to this matter.

Q. Did you draw anybody else's attention to it?

A. All the jurors that were there. But I spoke to him in regard to the matter because he was next to me, that was the reason. I went through around or back of the canvas of No. 8 room; came down on the back side of the brattice, went through the cross-cut to 7 and returned; then went down No. 8 room on to the 4th left left main entry.

Q. What other evidences of explosion, if any, did you find in room 15, 16 and 14?

A. We found boxes scattered and there was a cartridge standing in some room but I forget the number of the room.

Q. Was that cartridge standing up against the face of the coal?

A. Yes, sir.

Q. Now, Mr. Fletcher, if you have had occasion to examine into the causes of explosion — this one, please state so.

A. Yes, sir.

Q. Where and when and what was their character?

A. Yes, I have; I went through No. 2 mine at Frontenac, examined those air course after they had exploded.

124 Q. Was that prior to the explosion in the White Ash mine?

A. Yes, sir.

Q. What kind of an explosion was that in No. 2 Frontenac?

A. It was a powder explosion.

Q. When was that explosion at Frontenac?

A. It was in October, if I am not mistaken, '88, and I went to work for the company in '89.

Q. What other explosions have you had occasion to investigate?

Mr. FIELD: Objected to as cross-examination of his own witness.

Q. Mr. Fletcher, have you or did you form an opinion as to the cause of the explosion in the White Ash mine on the 27th day of February, 1895?

A. Yes, sir.

Q. Have you formed an opinion as to where that explosion originated?

A. Yes, sir.

Q. Tell the jury what is your opinion of that explosion and what was its cause.

A. My opinion was that it was through powder that had ignited at or near room 16.

Q. From what you saw there was there also an ignition of gas?

Objected to as leading.

Q. I will ask you, Mr. Fletcher, from the indications of fire and flame in rooms 8, 9, 10, 11 and 12, whether or not there was indications also of a gas explosion?

A. No, not when I was present.

125 Q. Now, I would like to have you explain to the jury, Mr. Fletcher, just exactly the system of air ventilation in the

White Ash mine, starting with the main intake and going right through the mine, prior to the explosion.

A. The fan is located at this point; this is the main slope or intake; the air travels down the main slope to the bottom of that plane; she splits half or nearly half, whichever way you want to regulate it, going to the right and half to the left. We have a parallel slope which is driven right with the main slope on each side of the main slope. The air would return through this cross-cut or through the last cross-cut between the main slope, it may be that left parallel slope, the air would return up through the back slope to the back entry of the 6th; as this plan shows she would go the last cross-cut on the 6th, returning on the 6th main, she would take in room that is driven off the 6th main.

Mr. CLANCY: There are no rooms shown driven off there.

A. She would come down the main 6th, through the cross-cut to the upper air course which parallels the 6th, on to the main slope, on to the main parallel slope, the left parallel slope; she would go up to the 5th, take the 5th back entry; she would return on the 5th main; she would take No. 1 room; she would turn down No. 1 room and through No. 3 room of the plane down through the cross-cut to No. 2, through the inside cross-cut of No. 1, to the back slope of the main slope; she would go up to the 4th left back entry, through
126 the 4th back entry to the last cross-cut, she would take No. 17 room, through the cross-cut to 16, through the cross-cut to 15, through the cross-cut to 14 and right back to the plane; she would go through No. 1, No. 2, No. 3; come through the plane cross-cut go up room No. 1, come through into the 3d left back entry she would traverse the 3d left back entry to the left cross-cut, go up to the face by a canvas and back to No. 20 room in through cross-cut into 19, through inside cross-cut to 18, come back to No. 8 room on the 3d left, into the 2d back entry, a portion of the air that would come through the rooms would split there and come back to the plane, and went through No. 1, No. 2 and No. 3 on the plane, up the plane where connection was made between the plane and the 2d back entry. She would take the 2d left back entry to the face, through the last cross-cut and ventilate 10, ventilate 9, she would go up 8, go through the cross-cut into No. *p*, go through the inside cross-cut to No. 6, through the cross-cut between 5 and 6 and back to plane entry; she would ventilate the plane room 1, 2, 3, 4 and 5, and connect with the first left back entry where connection was made with No. 5 room off the plane; she would the 2d left to the face, go through the last cross-cut; she would travel down through No. 1 left and take the overcast, make a joint current with the right parallel slope above the 1st right she would take the right parallel slope up to where the crop entry which was driven above the 1st left which went into the slope and the fan shaft or
127 the fan slope; now that is the left side. There was a little error here that I made in the 5th left. I want to correct it. When the air returned in the 5th left she took the plane into No. 1 room, then through cross-cut to No. 2, then into No. 3, then return

back through cross-cut into No. 1 room and came into the 4th left back entry.

Q. Now, Mr. Fletcher, from your knowledge of the system of ventilation of that property, state whether or not it was sufficient for the purpose of the proper ventilation of the White Ash mine prior to the explosion on the 27th day of February, 1895?

A. Yes, sir.

Q. Now, I want you to describe the character of stoppings from the main intake to the foot of the slope.

A. Well, the stoppings from the mouth of the main slope are put in with boards and adobe clay, for 20 or 30 of them was repaired previous to this explosion. Taking the main slope right clear down boards are put on and generally dirt thrown, gobbed on to its sides; the left parallel slope above the overcast acted as a manway; a man can walk into the work above the overcast; above the overcast stoppings were rock stoppings, were all put in if I remember right, 14 against the old work on the Rogers property or Rogers mines, and to the left also, the Green mine, as they were all connected together from one to the other; these stoppings are from three to four feet of rock; they had two coats of cement; there was fire on this side of the mine when we took possession of the property and I was on the ground myself when these stoppings were put in, with Mr. Brown, Mr. Rogers and other men on the ground helping to put them in.

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Q. Now describe the other stoppings clear down to the slope, the general character of the stoppings.

A. The stoppings on the main slope were cut in the sides and props were set boarded, plank was nailed on to the posts; then she was gobbed on both sides or filled full with dirt or refuse from the mine.

Q. Now, what was the character of the stoppings in all of the cross-cuts where stoppings were used the left side of the mine, were they some of them described by you as having been between the main back entries and the fourth left?

A. Yes.

Q. I will ask you whether or not these entries were such as were sufficient to perform their duties necessary to be performed in the conduct of the air through the mine.

A. Yes, sir.

Q. I will ask you now, Mr. Fletcher, whether or not air passing along the fourth left back entry before it would reach the face of the third left back entry, would have to pass all of the rooms from room 6 to the face of the fourth left entry.

A. Yes, sir.

Q. Then the air coming into the mine and *and* passing on to the left side of the mine for use by individuals working up in the rooms turned off the 3d left would first have performed its duty to the people working on the 4th left, would it not?

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A. Yes, sir.

Q. And the same as to people working in the 2d left, is that not so?

A. Yes, sir.

Q. That is, the air current in passing through the left side of the mine, in order to reach people working rooms on the 3d left, would have had to pass over these depressions in the 4th left air course up to the face, and through the rooms turned off of the 4th left up to room 6; is it not so?

A. Yes.

Court adjourned till 9 a. m. tomorrow.

Court met pursuant to adjournment.

Q. Mr. Fletcher, tell the jury how the fan, for what purpose that fan was used with reference to the ventilation of the White Ash mine, on or about the 27th day of February, 1895. What effect did it have?

A. Why, it exhausted the ventilation, it exhausted it from the mine and caused a vacuum in revolving, and the air was rushed in to occupy the space, or to replace that pressure rather on the outcast, or return air course rather it would be.

Q. What was the velocity of that fan, if you know?

A. We used to run it about 65 or 70 revolutions per minute.

Mr. FIELD: Object to the answer of the witness because it is not responsive to the question.

Q. And what effect did these revolutions of this fan have upon the air or gases in the mine?

A. It would draw them out.

130 Q. But how would the fresh air get into the mine?

A. It would go down the main slope and return up the return air course to the fan.

Q. Now, Mr. Fletcher, describe the dip of the coal measure in the White Ash mine, and the system of working it at that time.

A. Well, the dip is from 12 to 14 degrees; the main slope is driven on the full dip of the coal and cross-entries are turned at right angles to the dip. The rooms are turned off the cross-entry at about 45 degrees up the pitch; it is called "room pillar" system.

Q. Describe the room and cross-cuts and the pillars and entries other than the main slope.

A. Entries are driven 9 feet wide by the thickness of the coal; our cross-entries were driven the same; rooms were turned narrow, that is, 8 feet wide by the thickness of the coal for 24 feet, which we called the neck of the room, then it is widened out to 20 feet and between each room there is a pillar of coal left which is twenty feet thick, and every so far cross-cuts are driven between the *the* rooms from one room to the other, that is, 8 feet wide and the thickness of the coal.

Q. What was the average length of these rooms turned off the entry?

A. If I remember right, they were run about 30 feet, some a little more.

Q. Can you state in cubical feet a minute, what was the exhaust of that fan?

Mr. FIELD: Objected to because there is not a man on earth can state in cubical feet per minute the exhaust of that fan without any further information; there is no proper foundation for the answer.

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Q. You are acquainted with the fan and its power?
A. Yes, sir.
Q. Do you know what its exhaust was in cubic feet per minute?
A. I have seen it produce——
The COURT: Answer yes or no.
A. Yes, sir.
Q. State how much it was.

Mr. FIELD: Objected to because it is improper and no foundation is laid for the question, and the exhaust power of that fan does not appear in the question or in any part of the examination of the witness.

Objection overruled. Plaintiff excepts.

A. 48,000 to 50,000 cubic feet per minute.
Q. Now, how was coal mined in that mine at that time?
A. It was blasted out of the solid by drilling holes in and charging with powder, without there was roof pillars to be drawn, then coal would be sometimes undermined so as to save the amount of powder to the shot.
Q. Explain to the jury what you mean by "blasted out of the solid." Explain just exactly how a miner would mine the coal.

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A. Well, a hole is drilled right into the face of the coal and charged with powder; then it is fired by a patent squib, an explosion takes place and pulls down the coal; blows out the coal.

Q. Do you know, Mr. Fletcher, whether or not there were regular hours of firing in the White Ash mine at and before the occurrence of this explosion?
A. Yes, sir.
Q. What were they?
A. Entrymen were allowed to fire at 9 o'clock.
Q. What do you mean by entrymen?
A. That is the men driving the cross-entries or main slope. They were also allowed to fire at 12 o'clock, when also the room were allowed to fire at 12 o'clock. Entrymen were allowed to fire at from 2.30 to 3 o'clock, and also at quitting time. By this way it gave the entrymen four chances to fire during the day and the room twice; the room men had 20 feet to make their day's work there, while the entrymen only had 9 feet.
Q. How long prior to 12 o'clock, which was the regular hour for firing in the rooms, Mr. Fletcher, would miners begin to make their cartridges for the purpose of blasting coal from the solid, if you know of your own knowledge?

A. Well, from half past ten to 11, sometimes 11.30, so they had to time their holes right, so as to fire at noon.

Q. Then if this explosion occurred at 10.45, state whether or not—state what at that particular time the miners in the rooms would ordinarily be engaged in.

Mr. FIELD: Objected to as calling for the opinion of the
133 witness and not for any facts. It is asking the witness to speculate as to what these men might have been doing at the time of the accident.

Objection overruled. Plaintiff excepts.

A. Well, they would be loading their coal and after loading their coal, between times they would be preparing for firing shots, that is, drilling holes, making cartridges, damping their holes ready to fire at noon.

Q. Now, supposing the miners working in the mine on the 4th left entry or any one of them had *was* is called a bad shot, state whether or not permission was given to them to fire between regular hours in cases of that kind, and, if so, by whom.

A. It would be by permission of the mine foreman.

Q. Mr. Fletcher, do you know what is known as a windy shot?

A. Yes, sir.

Q. What is it?

A. It is where a hole is drilled too far on the solid and where the judgment of the man that charges the hole gives a too small charge to perform her work and not having powder enough to blow out the coal it blows out the damping.

Q. Describe the effect of such a shot.

A. It would be flame that would be produced from the gunning shot.

Q. How much flame?

A. That would depend entirely upon the amount of powder that was in the charge.

134 Q. Do you know how far flame would extend caused by a gunning shot?

A. Yes, I saw the effects of it in the 3d right in the White Ash mine previous to the explosion.

Q. State how far?

Mr. FIELD: Objected to as wholly immaterial what happened in the 3d right of the White Ash mine before the explosion. Being no evidence of a gunning shot in the 4th left.

Objection overruled. Plaintiff excepts.

A. Well, seventy feet as I know of.

Q. Do you know how much powder was accustomed to be used by the miners at work in the rooms and entries in the White Ash mine on the day shift?

A. No, sir, I could not answer that.

Q. Were you acquainted with the amount of powder required by two miners working in a room in order to produce the tunnage ordinarily produced on one shift in a room in that mine?

A. Well, they would use from 10 to 12 feet of powder from a 2-inch cartridge stick; there are 25 feet to a keg which holds 25 pounds.

Q. And how much powder then, according to your knowledge of the necessities required in the mining of coal in the 4th left entry would two miners be apt to have in any one room?

A. They would have 25 pounds; they used to take it down in 25-pound lots.

Q. Now at the time you made your investigation of the 4th left entry and the rooms turned off of the same subsequent to the
135 explosion, state what if any, indications you found of a powder explosion?

Mr. FIELD; Objected to; he has been all over that yesterday.

Mr. TWITCHELL: I want to bring out the special number of kegs; it has not been brought out yet.

Objection overruled. Plaintiff excepts.

A. Powder cans were rent open; there was a blue cast over the cans which indicated that powder had been exploded. There was one at or near the mouth of room 12, one up near the cross-cut in 15, there was two between 16 and a car, if I remember right; 3 between 16 room and the car and two on the inside.

Q. Inside of what?

A. Between the car and between 17 and 18 near the cross-cut.

Q. What in your opinion, Mr. Fletcher, would be the effect from an explosion of powder upon particles of carbon in the various rooms of that mine?

A. As quick as the powder would explode flame would be there, dust would rise, and she would ignite all small particles that would be in the air.

Q. What effect if any, would such a condition have upon any small quantities of gas either passing in any portion of the mine or in any portion of the 4th left entry which under ordinary conditions would in no way be dangerous in the operation of the mine?

136 Mr. FIELD: Objected to because it involved an assumption that there were some small quantities of gas in that mine which in no way would be dangerous except in case of a powder explosion; this is a hypothetical question not based upon any fact proven in the case; it involves assumption not drawn from facts proven.

Objection overruled. Plaintiff excepts.

A. It would ignite it if it came in contact with it.

Q. As to being wet or dry, what would you call the White Ash mine; was it a wet mine or a dry mine, or a medium mine?

A. I would not consider it a wet mine.

Q. Can you state, Mr. Fletcher, from your experience as a miner, where an explosion occurs and individuals are killed by concussion, whether or not the force of that concussion is felt in all directions or at all points at an equal distance from the initial point of the

explosion, provided the conditions in each direction, each and every direction are equal.

Mr. FIELD: Objected to because it does not appear that this man was ever killed by concussion or that he was ever present when anybody else was killed by concussion.

Objection overruled. Plaintiff excepts.

A. I should think so.

The COURT: Is there anything to show that these men were killed by concussion?

137 Mr. FIELD: Yes, we had evidence that they were killed by concussion.

Q. Now, Mr. Fletcher, supposing that room 8 was making gas and that the gas was in the air current passing through room 8 and there was an ignition of gas in room 8 at a point above the last cross-cut and near the end of the curtain, state whether or not, in your opinion, all of the gas in that particular place would be ignited and what effect it would have upon the props in the room, the curtains and the walls on each side of the room, the face and the two side walls as to giving indications of fire and flame.

A. It would surely fire all the gas in the room in the first place; in the second place the canvas would be blown down and scorched; props would be utterly charred.

Q. State whether or not the props nearest the face of the rooms would be burned in their entire circumference.

A. They would if the flames circled around.

Q. When you went into room 8 subsequent to the explosion, how far, if you know, from the face had the rails and ties in that room been taken up?

A. I went up to a tie that was set across there with the fire boss's mark on; I should judge about from 50 to 60 feet above the cross-cut. The props were charred opposite the cross-cut but up near the face the props weren't charred at all.

Q. Well, when you went in there how far was it from the last cross-cut coming from room No. 9 into room 8 that the track

138 was taken up; was the track taken up above that tie which you found on the track?

A. I think it was up to the tie.

Q. I wish you would take that lamp there Mr. Fletcher (referring to safety lamp in evidence) and show the jury just exactly how you would inspect for gas in a room.

A. Well, you would unlock your lamp and light it; it unscrews in this shape; you would light a wick; when you go into a room and was testing for the gas you would pull your flame down to about that size (illustrating with the lamp); then you would commence to go up towards the roof and any place where there was gas there would come a blue hood or blue-colored flame over the top of the lamp.

Q. You mean over the top of the other flame, don't you?

A. Yes, sir. And if she filled she would explode in the lamp.

Q. Explode where in the lamp?

A. Inside the gauze. Now the philosophy of it not coming out is that there is 784 of these little meshes to the square inch, and the heat that is in there, coming in contact with the gauze expands it when it reaches the temperature of the flame so that it will not come in contact with any explosive mixture on the outside of the gauze.

Q. Now, on the day that you and the coroner's jury went up into room 8, did you have that kind of a lamp with you?

A. Yes.

139 Q. State just what parts of room 8 you went into with this lamp, with reference to the face and the air current passing through room 8?

A. Went right up to the face of No. 8 room, across to the face, returned down to where the cross-cut led into No. 7 room; came across the room to the back side of No. 8 and went down No. 8 room.

Q. Did you find any gas?

A. Not a particle.

Q. If there had been any gas there would you have found it with that lamp?

A. I am positive we would.

Q. What was the conduct, Mr. Fletcher, in room 8, particularly of those of the coroner's jury who were there with you, as to making an inspection of that place, particularly of Mr. O. W. Alexander?

A. He made no inspection whatever.

Q. Did you see Mr. Alexander go under the curtain which runs from the last cross-cut in room 8 up towards the face?

A. No, sir.

Q. Well, did he go under there?

A. I could not swear that he did not; I don't think we would have let him break the curtain down in any shape or form.

Q. Well, if he had gone under the curtain he would have had to break it down, would he not?

A. He would have broken the current between the curtain and the face.

Q. The current of air?

140 A. Yes, and it didn't look reasonable that we would have allowed anything like that so long as we had the jury with us.

Q. What percentage of gas, Mr. Fletcher, can be detected with that kind of a safety lamp?

A. 3 per cent.

Q. Does it require a man familiar with the operation of a lamp of that kind to detect gas or not?

A. Yes, sir.

Q. As mine inspector at the time of this explosion and for a year prior thereto, what were your duties?

A. To inspect the mines of the Santa Fé company.

Q. How many mines did you inspect?

A. Well, we had mines in Illinois, Missouri, Kansas and northern Colorado and New Mexico.

Q. Did you ever inspect the White Ash mine?

A. Scores of times.

Q. Tell the jury how you would inspect it, and when you would make an inspection.

A. Well, I generally go down the main slope, generally with the superintendant and mine foreman; I would notice the timbers as I would be going down and see if they were broke or any broken timbers; notice the roof if there was any dangerous part to it; noticed the track; we generally took a reading of the amount of air that was traveling through the mines, we would go through the cross-entries and examine them closely as to whether there was any gases, and inspect the rooms as to their distance and conditions.

141 Q. How long had it been, Mr. Fletcher, prior to the explosion since you, as general mine inspector, had made an inspection of the White Ash mine?

A. I think it must have been almost three months. It took me about six weeks to make a trip all around all the properties.

Q. Tell the jury why it was that you had not made an inspection of the White Ash mine during that period.

A. Well, I had been in an explosion myself; I went to stop a fire at the mines on fire at Vulcan, Colorado, the mine was flooded with water; well I was burned there myself.

Q. Did you know the pit boss, the day pit boss, of the White Ash mine, at the time of the explosion?

A. Yes, sir.

Q. How long had you known him?

A. I had known him somewhere about four or five years.

Q. Where had you known him and with what was he connected during that time?

A. I think the first time I met Mr. Donohue was at Blossburg town, New Mexico, working.

Q. Where else?

A. I met him also at Starkville, and Rockville, or Brookside, Colorado. Then I met him at Waldo; he worked in Waldo and then at the White Ash mine.

Q. Will you please state to the jury what were Mr. Donohue's qualifications as a pit boss?

A. I would say he was a competent man.

142 Q. Did you know Mr. James Duggan?

A. Yes, sir.

Q. What position did he occupy at the White Ash mine at the time of the explosion and for five or six months prior thereto?

A. Mr. Duggan was superintendent of the mines there.

Q. How long have you known Mr. Duggan?

A. Why, I had known him about two years at that time.

Q. You had known him about two years then?

A. Yes, about two years I should judge.

Q. From your acquaintance with him and from your experience

as a mine inspector and as a miner, what have you to say with reference to the competency of Mr. Duggan for the filling of the position that he held at that time?

A. I would say that he was competent to fill the position, superintendent of mines.

Q. I will now ask you, Mr. Fletcher, from your experience as a miner and as a mine inspector and superintendent of mines, and from your knowledge of the safe and reasonable working of gas-y coal mines, to state whether or not any miner, no matter what his nationality or his ability to speak or write the English language, would cross over a fire boss's danger-signal mark?

A. He never would without he was blind.

Q. Now at the time that you made an examination of the rooms turned off of the 4th left entry subsequent to the explosion, state whether or not you made an examination of the roofs of these rooms?

143 A. Yes, sir.

Q. What, if any, evidences of heat and flame or explosion of powder or other explosions did you find on the roofs of these rooms?

A. In the back entry of the 3d left, of the 4th left, showed where the explosion had trended that way as the sides and roof had the blue cast showing that there had been flame through there.

Q. I will ask you to state whether or not there was any coal which had been shot down in room 17.

Question objected to as leading. Objection overruled. Plaintiff excepts.

Answer that question.

A. There was a little coal there where that shot had been fired, showed that the back of the shot was left in and very little coal was lying in the room.

Q. Now in making your examination of the various rooms subsequent to the explosion, what, if any indications did you find, as to any fire boss having been in any or all of those rooms?

A. Yes, the fire boss leaves a mark after he inspects the room for gas; he marks the day of the month and the initials of his name.

Q. Now, Mr. Fletcher, a few moments ago you stated that you found a tie in room 8 about 60 feet upon the track above the last cross-cut. I will ask you whether or not you are certain that it was 60 feet above the last cross cut, and if you are not certain state

144 where you now remember it to have been or if you have any desire to correct your testimony, give it.

Mr. FIELD: Objected to as cross-examination of his own witness, leading and suggestive and an intimation to the witness that he made a mistake that the gentleman would like to have him correct.

The COURT: If Mr. Fletcher—I will let him answer the question. Objection overruled. Plaintiff excepts.

A. The room was up about 60 or 70 feet above the cross-cut; No.

8 room was 60 to 70 feet above the last cross-cut. The tie was up above the cross-cut. Of course this has been 2½ years since that happened and it is a hard thing to do to remember just exactly where that tie was; I know that it was up above the cross-cut.

Q. How was that tie marked?

A. By X X, chalk mark which indicated danger. Every man in the mine and boy knew what it meant.

Mr. FIELD: I object to the latter part of the witness' answer.

The COURT: Gentlemen of the jury, the last part of the witness's answer as follows: "Every man in the mine and boy knew what it meant," is withdrawn, is not before you, and you will not consider it as in evidence.

Q. What color of chalk had been used, Mr. Fletcher, if you remember, in making these crosses which you found on this tie?

A. White.

Q. What significance did that chalk mark have to people working in the White Ash mine?

145 A. It meant danger.

Q. Well, what effect would that have upon a miner reading that upon a tie or in any other place in the White Ash mine, what would he do?

A. He wouldn't go over the mark.

Q. Now, I will ask you, Mr. Fletcher, whether or not in any part of the 4th left entry outside of room 8 you found any fire boss's danger signals at the time you made the investigation subsequent to the explosion.

A. Outside of room 8?

Q. Yes.

A. No, sir.

Q. After there has been an explosion, a powder explosion for instance, what is the effect upon the air in the immediate locality of the explosion?

A. Well, it uses up all the oxygen in the air.

Q. And what is the resultant composition after a powder explosion?

A. Of a powder explosion alone, why without we would get dust or gas combined in the air, why, we would have after damp from the result of the explosion.

Q. Suppose there was a combination of explosions from gas, dust and powder, what would be the resultant composition or condition?

A. All the oxygen would be used out of the air and we would get nothing but after damp or black damp.

Q. How many kinds of damp are there?

146 A. Well, there are black damp which miners generally call it, which is carbonic acid gas, and there is white damp; these are the only damps that we have.

Q. What is after damp?

A. After damp is a composition of gases after an explosion; it is composed of a portion of black damp and a little percentage of white damp in it and free nitrogen.

Q. Is there any oxygen in it?

A. No, sir.

Q. Then what effect does it have upon a person if he happens or walks into a place where this after damp is accumulated?

A. Well, if he stays in there any length of time it results in death.

Q. Can a man breathe with after damp?

A. For a very short time.

Q. And that is for the reason that there is no oxygen in it, is that not so?

A. Yes, sir.

Q. What effect does this after damp or black damp have upon any ordinary light?

Mr. FIELD: I object to the gentleman using the expressions, "after damp" and "black damp" as if they were interchangeable.

Question withdrawn.

Q. What effect does after damp have upon an open ordinary lamp?

A. Well, light will burn it.

Q. Is after damp, or that condition which exists subsequent to an explosion of powder, gas or carbon of any color? Can you see it?

A. No, sir.

147 Q. You have stated, Mr. Fletcher, that the entries in that mine were driven at a height equal to the height of the coal, and at nine feet wide; I will ask you to state whether or not it was necessary to have an entry of that size in order to take the air up to the face and through the rooms on the fourth left.

A. Well, it didn't require that much area.

Q. Now I will ask you whether or not the miners working in the rooms and at the face of the fourth left entry, would have been able to work there on the morning of the explosion if there had been an insufficient quantity of air passing through these rooms and who are the people who would have first noticed the insufficiency of the air.

A. The miners are the ones that would have noticed it.

Q. What would have been done by a miner if he had noticed an insufficiency of air?

A. He would surely have come out or made complaint to the foreman.

Q. If the current had been obstructed or was stopped what would have been the resultant condition so far as the air is concerned at the place where the miners were working?

A. They would have had none.

Q. What would originate there if the current was stopped?

A. Well, black damp would accumulate which naturally takes the breath away from men and mules.

148 Q. Now I will ask you if there was such a condition of obstruction in the fourth left air course whether men working in the rooms off of the third left main entrance would have noticed

the conditions sooner or later than people working on the fourth left?

A. It would have been sooner.

Q. Where?

A. Up in the third left, as the current of air would take the fourth and return to the third so that the men in the third would be short before the men in the fourth would be.

Q. From your experience as a miner and your connection with mines which generate gases, what have you to say with reference to the possibilities of a sudden and unlooked-for appearance of gas at any place in the White Ash mine?

Mr. FIELD: Objected to because this witness has testified that he saw no evidence of gas in the fourth left at the time of this explosion and this is a request to the witness to speculate about what might have been, what might have happened.

Objection overruled. Plaintiff excepts.

A. Men drilling holes may tap gas or a certain break in the roof where gas is given off from the adjoining strata, gas is liable to appear.

Q. What do you call that sudden appearance of gas or condition of affairs that produces gas in that way?

A. Well, a man drilling a hole is liable to come to a cavity or small place in the coal or opened slips which generate gas, sometimes
" strong blowers," the miners' term, and when gas is given
149 up from the adjoining strata, especially where there is a coal seam adjoining close, she comes down through any break that would be in the roof.

Q. I will ask you to state now, Mr. Fletcher, whether or not the likelihood of such a condition of affairs in a gas-y mine is known to the individuals working in a coal mine of that character?

A. Yes, sir.

Q. I will ask you Mr. Fletcher, if men were taking rails out of an abandoned or finished room, at which end of the track would they begin to work with reference to the face?

A. They would naturally commence on the inside first.

Q. I will ask you to state whether or not if two miners working in the White Ash coal mine go into room No. 8 for any purpose whatever would walk over the danger signal placed upon the railroad track or pass danger signals marked upon the coal, they did or did not violate the orders in that mine?

A. Yes, sir.

Q. They did what?

A. Violated the orders.

Q. Do you know Mr. Kilpatrick?

A. Yes, sir.

Q. What position did he occupy at the time of the explosion, if you know?

A. Night mine foreman.

Q. How long had you known Mr. Kilpatrick?

A. I had known him about 7½ years.

150 Q. What have you to say with reference to his competency for the position which he held at that time, if you know?

A. I would call him competent.

Q. Can you state, Mr. Fletcher, anything with reference to the production of coal in the White Ash mine during the month of February as compared with the production of coal during the month of January of that year from your own knowledge?

A. Not positively. I was there in January but I forget the production; I generally use to get the monthly production.

Mr. TWITCHELL: That is all. I will ask the privilege of recalling this witness if I find I have forgotten anything.

Cross-examination.

By Mr. FIELD:

Q. You were at Cerrillos in January?

A. Yes, sir.

Q. What time in January?

A. I could not tell just exactly the day of the month was, but I was there in January, but didn't go into the mine.

Q. Mr. Fletcher, you were in the city of Topeka, Kansas, at the time of this explosion, I believe.

A. Yes, sir.

Q. What do you understand by the term personal knowledge? Do you think a man who is in the city of Topeka, Kansas, when an explosion occurs in Cerrillos, New Mexico, can come be-

151 fore a jury and tell them of his personal knowledge what happened in that mine at or before the explosion?

A. Yes, sir.

Mr. TWITCHELL: Objected to unless the question is specified with reference to some particular personal knowledge testified to by this witness.

Q. Have you discovered any method, Mr. Fletcher, by which air can be conducted in opposite directions at the same time through the same channel?

A. No, sir.

Q. Is there any peculiarity about the air in the White Ash mine?

A. Yes, sir, after it has gone through the workings.

Q. The ordinary rules of physics, which apply to air generally, in your judgment do not apply to the air in the White Ash mine?

A. Well, after it has gone through the mine——

Q. Answer my question yes or no. Do or do not the ordinary rules of physics governing air generally, in your opinion govern the air in the White Ash mine?

A. I should think they would.

Q. Do you know whether they would or not?

A. I don't understand just your term.

Q. You are an expert on the ventilation of mines, aren't you?

A. I understand how to ventilate a mine.

Q. You know all about gases, too, don't you?

A. I know them when I see them.

Q. And when you are asked a question with reference to
152 the ordinary rules of physics as affecting air, you don't know what the question means. Will you answer the question?

A. I say yes.

Q. What are the ordinary rules of physics governing the movement of air though mines?

A. Well, it is as I would say, by the power that would be applied in reducing the density of the air, or added to it to pass the air through the mine.

Q. And that is what you understand by the operation of the ordinary rules of physics?

A. I may not understand your technical terms, Mr. Field, but I have had experience enough in a mine to understand the workings of a mine, and how it should be ventilated.

Q. Prior to the explosion of the White Ash mine, several hundred men had been killed in a mine operated under your direction, hadn't they?

A. No, sir.

Q. How many men had been killed in mines operated under your direction prior — the explosion in the White Ash mine?

A. None had been killed under my direction.

Q. No man was ever killed in a mine of which you were the inspector prior to the killing of the men in the White Ash mine?

A. I don't understand it that way.

Q. It is not very much that you do understand, is there, Mr. Fletcher?

A. Well, I understand about the ventilation of a mine, as I told you before, and about the working of a mine as a miner.

153 Q. Do you know whether flame will burn without air?

A. If there wasn't air there you wouldn't have any flame.

Q. Now then, when you made an inspection of the 4th left entry of the White Ash mine, wherever you found flame you know that there had been air going at the time of the explosion, don't you?

A. There had been air going there and the explosion or force of the explosion had met the air and traveled with it.

Q. Now, will you just confine yourself to an answer to my question, and tell me whether, from your great experience as a mine inspector, when you saw indications of flame on that 4th left entry, you knew then positively that at the time of the explosion, air had been going to that place where you saw the evidences of flame?

A. Why certainly, she had been going there.

Q. And the fact that there was no indication of flame at any place in the 4th left entry at the time of the explosion would be absolutely conclusive evidence that at the time of the explosion there was no air at that place, would it not?

A. There could not be any indication of flame there before the explosion in the first place.

Q. I am talking about after the explosion.

(Question repeated.)

A. If there was no air there there would be no explosion.

Q. You understand that to be an answer to the question, do you?

(Question repeated.)

154 A. Well, I claim if there was no air there there would be no explosion.

Q. And if there wasn't any air in any particular place there would not be any flame in that particular place, would there?

A. No, sir.

Q. That flame would not depart from the air current, would it?

A. If there was force enough in the flame or in the explosion she would go against the current; she would expand so rapidly that she would grasp the current and take out the oxygen in the air to feed the flame or the explosion.

Q. The flame could not go in that fourth left entry to any place where there was not air, could it?

A. It could.

Q. Then you can have flame without air?

A. Why, you have got to get air to have flame, and if there is an explosion, if there is material enough there to explode, she would expand and go through the mine, she would go through the space.

Q. Let us go back now to the original proposition, could flame go to any place in that 4th left entry where there was not air at the time of the explosion?

A. I don't think it would, as there would be nothing to feed the flame.

Q. You found evidence of flame in room 8, didn't you?

A. Yes, sir.

Q. Up how far? in room 8 towards the face?

155 A. It was up above the 2d cross-cut.

Q. How far up?

A. Well, I could not recollect the exact distance, but it was not very far.

Q. How far was it with reference to the tie; was it above that tie with the danger mark on that you have testified about, was the flame above the tie or below the tie?

A. At that time when we inspected the place with the jurors, canvas had been replaced and the ties were removed as there was no gas in the room.

Q. Mr. Renehan (the stenographer), read this witness that last question again. How far was it with reference to the tie? Was it above that tie with the danger mark on that you have testified about, was the flame above the tie or below the tie?

A. I would estimate it below it.

Q. Are you sure now that there was no evidence of flame at the time of your examination with the coroner's jury above the point where you saw the tie marked with the danger mark?

A. Yes, sir.

Q. Are you certain of that?

A. Yes, sir.
Q. You cannot be mistaken about it?
A. No, sir.
Q. You testified upon the former trial in this case, didn't you?
A. Yes, sir.

156 Q. Didn't you testify upon that former trial that the brattice was carried up to within 15 feet of the face of room 8 and that the props within 15 feet of the face of room 8 were burned?

A. No, sir; not as I recollect it.
Q. Well, if you did so testify, was it true, or false, Mr. Fletcher?
A. I don't think I testified that way, Mr. Field.
Q. You are perfectly positive now that the props which was nearest to the face of room 8 was not burned or charred?
A. Yes, sir.
Q. And you can't be mistaken about that?
A. The props were not charred within quite a distance of the face of room 8.
Q. You saw evidence of flame in the 4th left air course?
A. Yes, sir.
Q. On the roof?
A. On the sides and on the roof.
Q. How far was it towards the slope?
A. I would judge about 100 feet from the inside cross-cut.
Q. You mean 100 feet from the last cross-cut.
A. Yes, it was toward the back entry.
Q. You mean towards the slope?
A. Yes, sir.
Q. The stoppings of the last cross-cut but one was blown out, wasn't it?
A. I think they were all blown out along the 4th left back entry.
Q. They were all blown into the air course, weren't they?
A. Yes, sir.

157 Q. And prior to the explosion the entire space between the main entry and the air course in every one of these cross-cuts was filled in solid?

A. As a general rule they were filled.
Q. Now, will you explain to this jury, Mr. Fletcher, how you could blow the contents of a hole 30 feet by 6 feet by 9 feet into a hole 9 ft. by 6 by 9?
A. Yes, if she had power enough she would blow it through if it was 50 feet.
Q. Now, you just explain how it was done; the air course was 9 x 6 x 9 and the cross-cut was 9 feet x 6 x 30.
A. Well, it would take down the cross-cut or down the back entry; she would force through and the force of the explosion would carry it with it, and it might go 100 or 200 feet if the force was great enough.
Q. Well, if it only went its full length it would fill the air course solid for a distance of 30 feet, would it not?
A. Why, it would fill up the space along the entry.

Q. What was the height of the coal in the 4th left entry?

A. Well, she would run from 5 ft. 10 to 6 feet, sometimes over six feet.

Q. Where was it over 6 feet, Mr. Fletcher?

A. Well, I could not tell just the exact spot; I use to make a memorandum of the thickness of the coal on my inspections going around. We did have coal close to 7 feet thick on the right.

158 Q. These cross-cuts were all stripped out clean, were they?

A. Well, there was some as I went through were clean.

Q. When you went with the coroner's jury into that mine where was the first place that you went?

A. We went down the slope. If I recollect right we went into the 5th left and up through No. 1 room in the 5th left into the back entry of the 4th left. We went along the back entry for a short distance and there was some water there.

Q. How much water, Mr. Fletcher?

A. Well, Mr. Alexander walked into it. It came up pretty close to the top of his boots. I should say 14 or 16 inches.

Q. Was there, in your opinion, as an expert mine inspector, a sufficient quantity of water in that air course to materially obstruct the current of air?

Mr. TWITCHELL: Objected to without specifying as to time.

A. No, there was not.

Q. In your opinion as an expert mine inspector that passage was just as efficient for the conducting of air as if there had been no water in it at all?

A. It was large enough for the air that was required in there.

Q. Now, do you understand that I have asked you nothing about how much air was required in there? Don't you understand that I was asking you about the carrying capacity?

159 A. I said yes, it was large enough to carry the amount of air that was in there.

Q. Would it carry as much air with the water in it as if the water had not been there?

A. Certainly not.

Q. Then when you said it was just as efficient with the water in it as it was with the water out of it, you did not tell the truth, did you?

A. Well, it would carry the air that was required.

Q. Mr. Fletcher, is a body of gas extending across the face of a room and down 10 or 11 feet from the face into the room in your opinion a dangerous body of gas?

A. Not if it is not ignited.

Q. If you as a mine inspector of the White Ash mine, had information prior to this explosion that there was in room 8 of the 4th left entry of that mine a body of gas extending across the face of the room and down 10 or 11 feet from the face, what, if anything, would you have done about it?

Mr. TWITCHELL: Objected to if the court please, as a hypothetical question based upon facts not in evidence.

Objection overruled. Defendant excepts.

A. Well, I would have had it taken out of there.

Q. If you, as the mine inspector, had information that prior to this explosion there was a body of water in the fourth left air course extending to within three inches of the top of the low side,
160 and covering a place from 200 to 300 feet long in the air course, what would you have done about it?

Mr. TWITCHELL: Objected to; improper cross-examination; hypothetical question based upon facts not in evidence with reference to the time of the explosion.

Objection overruled. Defendant excepts.

A. I would have had it taken out.

Q. Was it part of your duty to prescribe the rules for the operation of the White Ash mine, and did you prescribe written rules for the conduct of that mine?

A. I used to talk over this matter with the superintendent, and the superintendent would issue rules that was for the benefit of the operation of the mine.

Q. Did you make any rules yourself?

A. Not written.

Q. Did you ever see any written rules which the miners were required to sign there?

A. Yes; I have seen rules there.

Q. Did you make these rules there?

A. Why, I know I suggested some of them.

Q. Did you make these rules?

A. Some of them.

Q. Did you make the rule governing the handling of powder in the mine?

A. No, sir; I did not.

Q. Did you ever see it?

A. I don't think there was any rules, if I am not mistaken at that time as to the amount of powder that should be taken down.

161 Q. If there was any such rule you know nothing about it?

A. Not, as I remember of.

Q. Mr. Fletcher, you testified on yesterday that in your opinion the cause of this explosion was the ignition of powder in room 16 of the 4th left entry, didn't you?

A. If I recollect right, I swore yesterday that it was at or near that point where the greatest effect of the explosion was shown.

Q. Now, did you or not on yesterday tell the jury that in your opinion, as the mine inspector, and from what you saw after that explosion, you were of the opinion that it was caused by the ignition of powder from a windy shot in room 16 of the 4th left entry?

Mr. TWITCHELL: Objected to as improper cross-examination.

A. No, sir.

Q. You did not on yesterday give it as your opinion that the explosion was occasioned by the ignition of powder by a windy shot in room 16?

A. No, sir, I did not state as it was from a windy shot, to my best recollection.

Q. Did you state that it was caused by the explosion of powder in room 16?

A. I stated that was what I found around there, powder kegs, opened; that in my judgment the explosion was from the effects of powder; if I recollect right that was my statement yesterday.

Q. But you did not say that it had its seat in room 16, or words to that effect?

162 A. At or near or between 16 and 17; I think I said, I think that was my evidence.

Q. Didn't you testify on the former trial that in your opinion that the explosion had its seat in room 17 or 18?

A. Not as I recollect.

Q. Were you not upon your former examination on the former trial of this cause asked this question: "Q. You are quite confident that this explosion occurred, had its seat, its origin, in room 17, and grew out of a windy shot?" and did you not answer: "A. Between No. 17 and 18, I said, where the seat or the origin of the greatest effects were shown." Did you not so testify on the former trial?

A. I testified on the former trial, but to my recollection just the spot I thought it was between 16 and 17.

Q. Then you say you did not testify upon the former trial that you thought it was between 17 and 18?

A. I could not recollect.

Q. Well, if you did testify upon the former trial that you thought it was between 17 and 18, was that true or false?

A. The effects from the explosion showed its greatest force around that locality.

Q. Now, have you any opinion at this time as to where that explosion had its seat, its origin?

A. Yes, I think it was caused——

Q. Where? I don't ask you how it was caused; where did it have its origin?

163 A. At or near around between 16 and 17, I would say.

Q. And not in 15 or 18?

A. Well, judging to my best recollection of the inspection, that would be my judgment in the matter.

Q. You testified on yesterday, that you saw no indication in the 4th left entry of the White Ash mine at the time of your inspection of a gas explosion, did you not?

A. No, sir, I said powder and gas, if I am not mistaken.

Q. Did you not say on yesterday in answer to a question by Mr. Twitchell that you saw no evidences that gas had been exploded in the 4th left entry at the time of your inspection?

A. I said that I had seen the effect of the explosion from the effect of the explosion from powder.

Q. Did you say that you saw no evidences of the effect of an explosion of gas?

A. Yes, sir, I saw the effect in where there had been effects of burning on the props, canvas, etc.

Q. That is all evidence of gas explosion, is it?

A. Well, there is not the least doubt but what taking the powder and gas being generated in the mine, that the gas would be ignited with the powder explosion as the flame went through the mine.

Q. You haven't any doubt, have you, Mr. Fletcher, that a part at least of the devastation which was created in that mine was due to the explosion of gas?

164 A. I think there was gas connected with the powder, but the cause of the origin I think was from powder.

Q. You have no doubt, have you, that there was gas exploded in that mine on the 27th day of February, 1895, have you, in that 4th left?

A. Yes, you take for instance——

Q. Can you answer the question yes or no if you try your best?

(Question repeated.)

A. Yes. I think there was gas exploded.

Q. The force of a gas explosion always travels against the air——

A. Also other explosions.

Q. The force of a gas explosion always travels against the air, don't it, Mr. Fletcher?

A. Yes, it goes against the air.

Q. The force of a powder explosion is always expended towards the point of least resistance, is it not, Mr. Fletcher, without regard to air?

A. Why, it would start out with the air; it would start out that way, but it would expand towards the current; it would meet the gas and the gas would expand so rapidly she would go against the air current.

Q. Now, will you answer my question. The force of a powder explosion is always expended in the direction or directions of the point or points of least resistance?

A. Yes, when it is powder alone.

Q. And if powder and gas combined the force of the explosion will travel against air in all instances, will it not?

165 A. Yes, because it requires the air to feed the flame.

Q. You have no doubt about that now, have you?

A. I notice she always comes to where the air is.

Q. And travels against the air, don't it?

A. Yes, sir.

Q. You are positively certain of that and can't be mistaken about it?

A. No, sir, not from my observations that I have had going around through other places where explosions have occurred.

Q. Well, now, if this is so, a powder explosion originating in room 16, 17, 18, or 15, or between these rooms and the air was coming from these rooms to room 8, will you explain to this jury

how the body of Alexander Kelly in room 8 came to be burned and how there came to be fire on the props in that room?

A. Well, when the explosion would take place she would go to the face of those rooms that were nearest to it, and take, for instance, to the face of the entry any particles of gas that was generated in any of these rooms which would be ignited and through the dust from the force of the expansion of the gas so rapidly, would raise the dust and you would have a violent expansion, which would expand quite a distance until the force was expended.

Q. Such an explosion would go against the air, would it? You can say that coming from 15 to 8 room was going against the air, can you, Mr. Fletcher?

166

A. Why no, but when she took the back entry, the stoppings were blown out, she would take the fourth; she would go through the rooms and she would go right clear up to the 3d, which she did—it showed where the canvas was, the line of the canvas.

Q. Flame would?

A. Well, if there was flame enough.

Q. Now, do I understand it to be your theory and that you tell this jury that it is your opinion that the flame which burned Alexander Kelly in room 8 passed from 15, 16, 17, or 18 room, whatever it was, along the air current to the face of the entry and back through the air course and up through the stopping and through the necks of the room?

A. Why, she would go through the rooms; it would expand and go through the rooms through the cross-cut, which it was showed plainly she did; it would go to the face of the places sometimes if they were short, and keep on going until it would expend itself.

Q. Let us go back and get this question over again, but I want an answer, yes or no, whether this is your theory of this explosion?

A. I think they were burned from that explosion in that manner.

Q. That involves the idea that the flame travelled in a circle in that mine, don't it? That is, if it started from wherever it did start, 15, 16, 17 or 18 room, and went all the way around that air course, and back to the point of beginning.

167

A. No, I don't think as it went back to the point of beginning at all.

Q. How did it get from room 8 to the point of beginning, if it had a point of beginning in room 16, 17, 18 or 15?

A. Well, it could have come down the 4th left and went up the mouths of the rooms or room-necks, or it could have taken the cross-cuts right through the faces.

Q. In your opinion did it go up the necks of the rooms?

A. I think it went through the cross-cut.

Q. Wasn't there conclusive evidence that that flame spread through the cross-cuts towards the face of the entry, from room 8 up to the face of the entry or to 18?

A. Not as I recollect.

Q. You saw nothing of that, sir?

A. Well, I saw where there had been canvas strewn and kegs as I spoke of, and props charred, canvas brattice, which was an indica-

tion that the explosion had been through there. It must have been through there, and some men would have been burnt.

Q. And it must have gone against the air to get through there, musn't it?

A. Well, it could have gone against the air and blown out these stoppings.

Q. Answer my question yes or no; must have gone against the air to get through there?

A. Yes, it did go against the air there.

168 Q. What experience, of your personal knowledge, had Donohue had as a pit boss at the time of his appointment as pit boss in the White Ash mine?

A. Well, he had, I don't know of any particular place where he had acted as mine foreman, but he was a man that had a great deal of experience in mines all his life, and I knew from works that he had done around other mines that I had met him as a miner.

Q. Did you understand me to ask you his qualifications? I asked you what experience he had as a pit boss in mines prior to his appointment as pit boss in the White Ash mine?

A. I could not answer that question; I don't know.

Q. Of your own personal knowledge what experience had Kilpatrick had as a pit boss in mines prior to his appointment as pit boss in that mine?

A. Well, I had known Mr. Kilpatrick for seven years, working at the Carthage mines.

Q. He had men working under him as pit boss?

A. No; McKinley was mine foreman.

Q. Do you know that when I ask you about a man's experience as pit boss, I don't want you to tell about his experience as something else? Now tell this jury, if you know, whether Kilpatrick had men working under him as a pit boss?

A. I don't know.

169 Q. What experience as a mine superintendent had Duggan, of your knowledge, at the time of his appointment to be superintendent of the White Ash mine?

A. I never knew Mr. Duggan until he got the appointment as superintendent at Madrid.

Q. Do you know when that was?

A. I could not tell the exact date.

Q. Do you know that Mr. Duggan had not been underground in a mine for eight years at the time he was appointed superintendent of the White Ash mine?

Objected to as improper cross-examination based upon a fact not in evidence.

A. Well, from the connection that I had with Mr. Duggan after his appointment as superintendent of the Madrid mine, going through the mines as I did, I should judge hundreds of times, I knew he was a careful, competent man.

Q. Do you think that is an answer to the last question I asked you, Mr. Fletcher?

A. I don't know; I answered that I didn't know Mr. Duggan before he arrived at Madrid in regard to his competency or not.

Q. Do you know that Mr. Duggan had not been underground in any kind of a mine for eight years prior to his appointment as superintendent of the White Ash mine?

A. I don't know it.

Q. Didn't you hear him testify to that under oath on the former trial of this case?

A. I remember it, but I forgot it.

Q. Do you know or did you know, that Mr. Duggan, at the time of his appointment as superintendent of the White Ash mine,
170 could not take a safety lamp and go into a mine and inspect it for gas, and that he never had handled a safety lamp in his life?

Objected to as improper cross-examination. Objection overruled. Defendant excepts.

A. He had a man appointed down below there; men that were supposed to do that.

Q. Do you think that is an answer to the last question I asked you?

A. I think that is an answer. Give it to me; I will give it as closely as I can.

Q. Question repeated.

A. If he could not, I don't know it.

Q. Would you consider a man to be competent for superintending the White Ash mine who had absolutely no practical experience in operating a gasy mine prior to his appointment and who could not take a safety lamp and go into a mine and inspect it for gas?

A. Why, a superintendent could fill that position of superintendent of the mine without going into the mine, if he had competent men below.

Q. And it was no part of Mr. Duggan's business to go into the mine then?

A. Not if he has competent men there to run it.

Q. Was it not part of Mr. Duggan's business as you understood it, to go into that mine and personally know the condition of the working places and air courses in it?

A. I know as he did go down into it.

Q. Question repeated.

171 A. Yes, it was his duty to go down.

Q. Is a man who don't know how to operate a safety lamp in your judgment a competent superintendent to go down into a gasy mine and personally examine into the condition of the working places?

A. I would say not.

Q. What amount of air in your opinion, as an expert, was necessary to expel from the White Ash mine all of the noxious gases which were generated in the working places of that mine?

A. I think 25,000 cubic feet would ventilate the mine if it was carried to the faces.

Q. Is it your opinion that in order to get proper ventilation of that mine, it was necessary to get 25,000 cubic feet of air per minute going to the working faces of that mine?

A. No, I don't think it did require it.

Q. Well, how much in your opinion was necessary to be carried to every working face of that mine in order to expel the noxious gases which might be generated there at and prior to this explosion?

A. 4,000 or 5,000 feet would dilute or carry off any gases that was given off there.

Q. No doubt about that, is there, Mr. Fletcher?

A. Well, from what had been generated in the mine from time to time.

Q. There is no doubt that 4,000 or 5,000 feet of air per minute carried to all the working places in that mine would expel all the gases, is there?

A. I am sure it would.

172 Q. Well, then if the gas was not all expelled, it is proof certain that there was not 4,000 or 5,000 feet of air per minute going to the working places?

Objected to as calling for the conclusion of the witness, leading, and improper cross-examination, and everything else that could possibly be shown against it. Objection overruled. Defendant excepts.

A. It might have been got to all the working places except where connections were not made with cross-cuts or bratticed in close to the face.

Q. Well, if there was gas accumulated or accumulating at any one working place in the mine, is it not a self-evident proposition, Mr. Fletcher, that there was not a sufficient quantity of air going to that particular working place to expel that gas?

A. Well, there would not be enough to go up to that particular place.

Q. Well, given the proposition that gas extended across the face of the room and 10 or 11 feet down from the face, does not that conclusively prove that there was not at that time a sufficient quantity of air going to that particular working place to expel that gas?

A. Well, the canvas might not have been up to the face.

Q. Let us try a yes or no answer once for a change.

A. I will say there was not.

Q. You said, I believe, on your direct examination, that as you understood the workings of that White Ash mine and the

173 method of ventilation, of the air which passed from the 4th left, or working places on the 4th left entry, all of it had to go to the 3d left and the 3d left could get no air which had not first gone through all of the working places on the 4th, didn't you?

A. Yes, sir.

Q. Do you know that at the time of this explosion and for ten days or two weeks before there was a direct opening from the par-

allel air course through to the upper air course on the 4th left plane?

A. No, sir; if it was made, why it was made in my absence.

Q. If there was any such opening any air which escaped into the 4th left plane, would, after supplying the men there, go, after supplying other men on the 4th left, directly to the 3d left, would it not?

A. Yes, sir.

Q. Would not air which escaped from the main slope into the 4th left go to the plane or on to the 3d left without going through the other working faces on the 4th left?

A. If there was any escaped, but it was not supposed to escape; there was a door there to check it.

Q. But if it did escape it would go that way?

A. Yes, sir.

Q. If there were any leaks in the stoppings going into the plane of the 4th left, it would go to the 3d left in the same manner without going to the other working places, on the 4th left, would it not?

174 A. That would depend, Mr. Field, upon what stoppings it leaked through.

Q. If it ever leaked into the 4th left plane, it would go right on in the direction that I have pointed out to you without regard to where it came from, would it not?

A. There is no stoppings connecting the plane of the 4th left between the slope and the plane.

Q. Did you understand me to ask you anything about any such thing? (Question repeated.)

A. Yes, sir.

Q. And if it got into the 4th left main entry it would go that way also, would it not?

A. Well, it would if there was not a check, that is a curtain on the plane, then it would take the 4th left, up to what room connected its cross-cuts to the plane?

Q. Every time the door was opened some air came through, didn't it?

A. Yes, sir.

Mr. FIELD: I think that is all.

Court adjourned till 2 o'clock, p. m.

Court met pursuant to adjournment.

Redirect examination.

By Mr. TWITCHELL:

Q. Did you hear the testimony of Mr. Ray?

A. No, sir,

Q. Supposing that there had been gas at No. 8 room in the 4th left entry and there had been the usual fire boss's danger signal

175 place- there, state whether or not as far as the security and protection of property and life in that mine was concerned

everything had been done by the placing of that fire signal for the protection of life and property in that mine?

Mr. FIELD: Objected to as not proper redirect examination.
Objection overruled. Plaintiff excepts.

A. He had performed his duty, yes.

Q. Tell me, in answering that question, Mr. Fletcher, whether everything had been done as far as the duties incumbent upon the officials charged with the protection of life and property in that mine had been performed?

Mr. FIELD: Object to that question because that is exactly what this jury is sitting here to determine.
Objection overruled. Plaintiff excepts.

A. Yes.

Q. Now, Mr. Fletcher, supposing that the body of the miner, Kelly, whose body was found in a cross-cut between rooms 9 and 8, was found in the condition testified to by the witness, Mrs. Kelly, in a burned and broken condition, and supposing the body of the other miner found in room 8 was found at a point further up the railroad track towards the face of room 8, was not burned how do you account for that fact?

Mr. FIELD: Objected to as a hypothetical question not based upon any evidence in the case, and also improper redirect examination.

176 Objection overruled. Plaintiff excepts.

A. Well, that would show that Kelly was in the line of the explosion and that the explosion or flame did not go up to the face of room 8 or else Flick would have been burned.

Q. In your cross-examination, Mr. Fletcher, you testified with refence to the flame following an explosion and the direction which it would take, I will ask you now, upon the theory which you have advanced with reference to the cause of this explosion and where it originated, what would be the difference of time between an explosion or igniting by the ignition of powder and the consequent ignition of gas at whatever place it might be found in the rooms turned off of the 4th left entry.

A. It would be almost instantaneous.

Q. I understand you then to testify that if the origination of the explosion was in the neighborhood of room 16 or 17 and caused by the ignition of powder, according to your theory of this case, that there would have been an instantaneous explosion of different quantities of gas that may have been in any part of the 4th left entry of the rooms turned off the same?

A. Yes, sir.

Q. Then if gas in consequence of the powder explosion were ignited in rooms 12, 11, 10, or 9, or 8, what would have been the effect so far as flame is concerned instantaneous with the powder explosion?

A. Why, it would be an instantaneous flash, a flash as quick as lightning.

177 Q. Do you know how long it was from the time of the appointment of Mr. Duggan as superintendent of that mine to the time of that explosion?

A. I don't know, I rather think it was about two years, if I am not mistaken.

Q. State whether or not during those two years you were inspector of the White Ash mine under your employment?

A. Yes, sir.

Q. State whether not during those years as inspector you knew of your own knowledge as to Mr. Duggan's competency to perform the duties incumbent upon him in the proper management of the White Ash Mine property?

A. Yes, I think he was competent to fill the position.

Q. If there had been no current of air at the face of room 8 at the immediate time of this explosion, would there have been any current of air at the face of room 9?

A. No, I don't think there would.

Q. If there had been no current of air at the face of room 8 at the time of this explosion would there have been any current of air at the face of room 7?

A. No, sir.

Q. If there had been no current of air at the face of room 7, would there have been any current of air on the plane-room of the 4th left where the men were working at the time of the explosion?

A. No, sir, not as I know of.

178 Q. You heard the question propounded by Mr. Field this morning with reference to some sort of break-through or opening from the parallel air course, left parallel, about which there is question which would seem to be intended to convey the idea that air would be conveyed to persons working on the plane of the 4th left; what, if anything, do you know about any such opening?

A. Not any.

Q. If there had been a door or a break-through there in the conduct of the air through that mine would it have been opened or closed?

A. Closed.

Q. Do you know anything about any such door?

A. I do not.

Q. Were you in the habit of going through that mine?

A. Yes, sir.

Q. Did you ever go through any such door?

A. No, sir.

Q. Did you ever know of anybody going through any such door?

A. No, sir.

Q. I will ask you what any two men going into room 8 and finding the brattice in that room down, would have done if they had seen a danger signal lying across the track in that room.

Mr. FIELD: Objected to as a hypothetical question, not based upon any evidence in the case and not proper redirect examination.

Objection overruled. Plaintiff excepts.

179 A. They would have fixed up the brattice; they never would have crossed that line.

Q. Supposing in order to fix up that brattice it would have required them to cross over the danger mark, would they have crossed the danger mark with a naked light?

A. No, sir.

Q. I will ask you whether a man going into room 8 through the upper cross-cut from room 9 with a naked light could tell whether or not there was a current of air passing in its usual course towards the face of room 8.

A. No, sir.

Q. I will ask you whether or not a miner working in the White Ash mine in passing through the cross-cut from room 9 into room 8 and going towards the direction of the face of the room, and finding danger signals, would continue in that direction, or in the performance of any duty beyond that danger signal.

A. No, sir. That would be—I would like to explain that a little further. That would be beside the fire boss himself.

Q. I mean to go over that danger signal with a naked light?

A. No, sir; never would.

Q. Do you know whether or not at the time of the explosion or just prior thereto within a month or so, there was any change in any rule with reference to the amount of powder which miners were permitted to bring into the mine for the purpose of pursuing their work in mining coal?

180 Mr. FIELD: Objected to because not proper redirect examination; because the witness said upon his cross-examination that he didn't know that there was ever a rule with reference to the amount of powder which the miners were allowed to take down in the mine and conclusively if he didn't know there was a rule he could not know about the change.

Objection sustained. Defendant excepts.

Q. I will ask you then if you know—I will withdraw that question in the first place. I will ask you if you know how many pounds of powder a miner was permitted to take down into the mine and keep in the room at any one time, as mining inspector of that mine, from your knowledge of the custom?

Objected to. Objection overruled. Plaintiff excepts.

A. They used to take down 25-pound kegs.

Mr. FIELD: Objected to as not responsive to the question.

The COURT: The answer of the witness last given, that they used to take down 25-pound kegs is withdrawn.

Q. Question repeated.

A. Yes, sir.

Q. How many pounds was it?

Mr. FIELD: I object to this question as to evidence as to this custom because if it was not in accordance with the rules of the mine, by which the men were bound and which they signed, it is not
181 competent or proper to show anything of this kind again. What I mean by this is: Here were rules which regulated this subject and which the men signed when they went to work; now anything different or anything different from that I submit is incompetent in this case. Here is the rule.

Mr. TWITCHELL: I object to the reading of any rule; we are relying entirely upon the cross-examination.

Mr. FIELD: Objected to upon the ground that the quantity of powder which a miner was allowed to take down into the mine was regulated by a contract in writing between the miner and the company.

Objection overruled. Plaintiff excepts.

A. I say they took a keg which contains 25 pounds.

Q. With reference to Mr. Kilpatrick, Mr. Fletcher, prior to the White Ash mine explosion what official positions with reference to the operation of coal mines had you known him to occupy in this Territory?

A. He was acting foreman at one time at Carthage, New Mexico, and he filled the position as night foreman at the Hard Coal for some time.

Recross-examination.

By Mr. FIELD:

Q. Mr. Fletcher, if it should turn out in the evidence in this case that Mr. Flick's body was burned by flame, this new theory
182 that you have vivified since we adjourned would be exploded, would it not?

Mr. TWITCHELL: Object to any evidence to that effect.

Objection overruled. Defendant excepts.

A. Well, if he was not burned there was no flame up there.

Q. And if he was burned there was flame up there?

A. Yes, sir.

Q. And all of your explanation which you made to Mr. Twitchell based upon the idea that Flick's body was not burned would go for naught, if the evidence shows that Flick's body was actually burned, would it not? Now, I want an answer, yes or no.

The COURT: He can answer yes or no and then he can explain.

A. Why, no.

Q. Your explanation is the same whether Flick's body was burned or not burned, is it?

A. My explanation was that the flame was——

Q. Answer the question yes or no.

The COURT: I told him he had a right to explain.

Q. Your question is the same whether Flick's body was burned or not?

A. Yes, in regard to the props not being charred at the face of No. 8 room.

Q. In your opinion the question as to whether Flick's body was burned or not burned throws no light upon the question as
183 to whether there was a current of air going to the face of room 8 at the time of the explosion or not?

A. No, sir, it does not.

Q. Look at the book shown you which is Exhibit "B," and rule 13, entitled "Distribution of powder" in that book, and stated whether or not that was a rule of that mine formulated by you or under your direction.

Mr. TWITCHELL: Objected to as immaterial, if court please; there has been no testimony whatever, either on redirect or cross or direct, with reference to rules.

Objection overruled. Defendant excepts.

A. No, sir, the rule was not formulated by me.

Q. Nor under your direction?

A. No, sir.

Q. And you never knew the existence of any such rule?

A. No, sir.

Q. In your opinion as a mining superintendent was such a rule necessary for the protection of the men working in that mine?

Mr. TWITCHELL: Objected to as improper recross-examination.

Objection overruled. Defendant excepts.

A. Why, I would consider it more beneficial to the protection of the men to take in five pounds instead of 25.

Q. Then, as I understand, you think that such a rule was
184 reasonable and necessary regulation in the manner of handling powder in that mine for the protection of the men?

Objected to. Objection overruled. Defendant excepts.

A. I don't think it was necessary.

Q. Then, as I understand you, you think that such a rule was an unreasonable and un-ecessary regulation?

Mr. TWITCHELL: Objected to; his answer does not imply that it was unreasonable.

A. No, I don't think it was unreasonable.

Q. Then in your opinion, it was neither reasonable nor unreasonable?

Objected to as immaterial. Objection overruled. Defendant excepts.

A. Well, it would be more safety to the men.

Q. A habitual violation of that rule would add to the danger of the men working in that mine, would it not?

Mr. TWITCHELL: Objected to, if the court please, as a hypothetical question based upon facts not in evidence, there being no proof here of any violation of the rule and the only proof being as to the custom of the miners in the use of powder in a room.

Objection overruled. Defendant excepts.

A. It would if it were exploded.

185 *Rebuttal.*

By Mr. TWITCHELL:

Q. But it is a fact, nevertheless, is it not, Mr. Fletcher, that it was customary for the miners to take 25 pounds of powder into this mine and that fact was well known to every miner working on the 4th left entry of that mine, for a considerable time prior to that explosion and at the time of the explosion?

Mr. FIELD: Objected to as calling for a conclusion and opinion of the witness.

The COURT: If he knows he can answer. Objection overruled. Plaintiff excepts.

A. I have noticed, as I said before, I have noticed them taking kegs of powder down which contains 25 pounds. In regard to the men on the 4th left entry I could not say whether they would be acquainted with the matter or not, all of them.

Q. What was the capacity of every exploded powder can that you found in these entries and these rooms after the explosion was over; how many pounds will a can hold?

A. They were 25-pound cans.

Witness excused.

Mr. CLANCY: We desire to offer that (Exhibit "B") as part of the cross-examination of Mr. Fletcher, rule 13, to which reference was made.

Mr. TWITCHELL: Objected to. Their time to use it was in connection with their case-in-chief, and it is improper to lug them in in connection with cross-examination, and there was nothing
186 said with reference to these rules in direct examination. Objected to on the part of the defendant as an improper introduction of rule 13, Exhibit "B" by the defendant upon the testimony admitted to be brought out on cross-examination of plaintiffs with reference to a matter not referred to in the rule, being testimony on the part of the defendant as to a custom.

The COURT: I will admit this upon the statement of counsel that if not offered now it would be offered in rebuttal.

Defendant excepts.

EXHIBIT "B," Page 29, Rule XIII.

Distribution of Powder.

For the safety of the miners the company has appointed a man on top of the mine for to deal out the powder to the men. No miner is allowed for to take down more than one five (5) pound powder can in the pit for one day's work; and each and every miner is to have a box in his place for to keep the powder in.

WILLIAM KILPATRICK, called and sworn as a witness for the defendant, testifies as follows:

By Mr. TWITCHELL:

Q. State your name, age and occupation.
A. William Kilpatrick, 30 years of age, miner.
Q. What was your business on the 27th day of February, 1895?
A. Night foreman of the White Ash mine.
187 Q. Do you know of anything that happened at the White Ash coal mine on the 27th day of February, 1895?
A. Yes, sir.
Q. What was it?
A. An explosion.
Q. Do you know where that explosion occurred, of your own knowledge?
A. In the 4th left entry.
Q. Do you know in what part of the 4th left entry the explosion occurred?
A. No, sir.
Q. How long have you been a coal miner, Mr. Kilpatrick?
A. Over 16 years.
Q. Are you familiar with all the workings of coal mine-?
A. Yes, sir.
Q. How long had you been familiar with the workings of the White Ash coal mine at the time of this explosion?
A. For almost two years.
Q. Where had you worked prior to your employment in the White Ash coal mine as a coal miner?
A. In Scotland, Pennsylvania, Ohio and New Mexico.
Q. Where had you worked in New Mexico besides the White Ash coal mine?
A. In Carthage, Socorro county, and in the Hard Coal at Madrid.
Q. You mean by the Hard Coal, the Hard Coal mine at Madrid?
A. Yes, sir.
188 Q. Look at that map over there and state whether or not you are able to identify the workings of the White Ash coal mine on the 27th day of February, 1895, from that map?
A. Yes, sir.
Q. Do you know how the White Ash mine was ventilated?
A. Yes, sir.
Q. How was it ventilated?

A. By a fan at the mouth of one of the air courses on the outside.

Q. Point out on the map the exact location of that fan.

A. On this here (indicating).

Q. Did this fan drive air into the mine or exhaust air from the mine?

A. It exhausted air from the mine.

Q. Using that map can you show the jury the course of the air in its course through that mine on the morning of the 27th of February, 1895?

A. Yes, sir.

Q. Please show the course of the air through the left side of the mine.

A. Going in at the mouth of the main slope, traveling direct down the main slope to the bottom cross-cut, and coming up the back slope to the 7th left back entry, going along the 7th left back entry to the face of that entry, through the 7th left back, through a cross-cut at the face of the entry, on to the main entry and returning on the main entry to the return air course and the back slope, up the back slope to the 6th left back
189 entry, to the face of the 6th left back entry, going through the cross-cut into the main entry of the 6th left, returning back along the 6th left, going up the return air course of the 6th left to the back slope, up the back slope to the 5th left back entry, going through the cross-cut to the 5th left back entry, going through this cross-cut to the 5th left main entry, returning back along the 5th left main entry to No. 1 room of the 5th left back entry up to the 4th left back entry, going along the 4th left back entry to the face of the 4th left back entry, going through a cross-cut at the face of the 4th left back entry or on the main entry of the 4th left, coming back out of the 4th left main entry by bratticing from the face of 18 room back behind that brattice up to 17 room, up 17 room through a cross-cut into 16 room, and through a cross-cut into 15 room, through a cross-cut in 14 also 13, also 12, also 11, also room 10, room 9, room 8, room 7 and rooms 6, where a split was made on room 6 by a canvas, allowing the larger bulk of this air to go into the 3d left back entry and sending a part of this air from room 6 through the cross-cuts into 5, 4, 3 and 2, down No. 2 room on to the main entry, up to the plane of the main entry, up the plane and into No. 1 room of the plane, through every cross-cut, from No. 2 room on the plane into No. 3 of the plane, out of No. 3 room up to the plane again, then through a cross-cut off the plane into No. 1 room of the 4th left, up No. 1 room of the 4th left into the back entry of the 3d left, traversing the entire course of the 3d left back entry, through a cross-cut into the 3d left main
190 entry back from the main entry into all of the rooms of the 3d left back entry, to No. 8 room of the 3d left, where it came up into the back entry of the 2d left, and back through into the main entry of the second left, and through this series of rooms on the 2d left into the back entry of the 1st left, back through into the

main entry of the 1st left taking its course to the overcast, and going in a direct course almost to the fan.

Q. Mr. Kilpatrick, do you know what a gaseous mine is?

A. Yes, sir.

Q. As to being a gaseous mine or not state what was the White Ash?

A. The White Ash was a gaseous mine.

Q. I would like to have you, before proceeding further, state what was the character of the cross-cut, of the stoppings and the cross-cut along the main slope and in the cross-cuts between the main and back entries of the 4th left and of the 3d left, and 2d left in the White Ash coal mine just prior to the explosion?

A. The stoppings in cross-cuts from the main slope to the parallel slopes were posts, board posts, set about 3 in the line, one at each rib and one in the center; then probably about a foot from these posts would be three more posts set opposite these three that had been put up; then who ever has putting in the stoppings would get into the solid coal on each side and nail from the floor to the ceiling, on the outside of these props, these two rows of props,

191 plank, then fill in up towards the roof with sand; these were all the way down the main slope along the 4th, 3d and 2d.

Q. Now, with reference to being air-tight or approximately air-tight, how were these stoppings?

A. There would be very little leakage.

Q. Now, with reference to the cross-cuts between the main and back entries on the left side of the mine?

A. In the cross-cuts between the main and back entries would be three props set, one at each rib and one in the center of the cross-cut, and whoever was putting in the stoppings could get into the rib, and nail plank to these props lapping each board in this manner, about one-half or ¾, probably an inch over one another, and then nailed over any openings they might see, or seams in these boards, pieces of canvas, and throw all loose dirt there would be, on each side of this board stopping in the cross-cut or in the entries up against that stopping, against these boards.

Q. What was the efficiency of these stoppings in the matter of turning air?

A. They were good.

Q. How, if you were making the effort, would you detect any leakage in any one of the stoppings?

A. By examining the stopping with a naked light you could detect any leakage there might be of air on the blaze of your lamp.

Q. How was coal mined in the White Ash mine on the 27th day of February, 1895?

A. Blown out of the solid.

A. How then was it taken out of the mine?

192 A. Loaded into pit cars by the miners and hauled up by mule power to the parting, hoisted by cable from the power to the top, by wire rope.

Q. What do you mean by a parting?

A. A double track made——

Q. Show on the map? In the 4th left entry for instance, show the parting.

Q. The parting on the 4th left was right here; two tracks with a pillar between, 200 feet from the main slope or 250 feet, commencing at 170 feet would be over 100 feet of parting or about 100 feet of parting and 100 feet of double track.

Q. When were you in the White Ash coal mine last prior to the explosion?

A. A few minutes before five o'clock on Wednesday morning.

Q. How long was that before the explosion occurred?

A. About six hours.

Q. What had you been doing during the ten hours previous to the time you left the White Ash mine on the morning of the explosion? Where were you in the mine and describe what you did that night.

A. Oh, I had been all over the mine, in every working place in it and out and in the different entries several times.

Q. Now, I want you to tell the jury what time on Tuesday night you went to work in the White Ash mine?

A. I got to the cabin above the 2d left every night a few minutes before 7 o'clock.

Q. Well, on Tuesday night prior to the explosion, did you get there at that time?

193 A. Yes, sir. Left my dinner pail and coat there and stayed there until every miner had passed the fire boss that had not gone in before me.

Q. Now, tell the jury exactly what you did from the time you left the fire boss' cabin until you left the mine on Wednesday morning, if you can remember at this time, if you can remember.

A. I went in the 2d left.

Q. Can you point out on the map where you went, so the jury can see?

A. Yes, sir. Going into the 2d left main entry, I would visit——

Q. Where you went that night, if you remember?

A. That is entirely too long for me to remember. I had a custom in traversing that mine.

Q. You state that you had a custom in traversing that mine, Mr. Killpatrick; state whether or not you followed that custom on the night prior to the explosion.

A. Yes, sir.

Q. Can you tell the jury what was your custom in traversing that mine?

A. Yes.

Q. Well, if you can, please point it out on the map, or if you can testify from where you are sitting, do so.

A. I would generally go to the 3d left parting with the boss driver, from the 3d left parting down to the 4th left parting, then go on in the 4th left and go through the working-rooms of the 4th left and come out along the back entry to the slant in the

194 4th left, and go up the plane of the 4th left to where the working places are up there, and come back down, go through

a sliding door inside the trap-door of the 4th left main entry; down into the back entry of the 4th left, back on to some pillars on the 5th left, go through these pillars that were working, down into the 5th left main entry, go down to the 6th left main entry, and go through across from the 6th left to the 6th right, go up the plane of the 6th right to some places that were working up there, and from the 6th right plane come out on the slope and go into the 5th right and go up the plane to some places that were working there, and come out on the slope and go into the 5th right, into a place that was working there; come out on to the slope, go into the 4th left parting again, and go up the back slope from the 4th left parting, to the 3d left, go into the 3d left entry to the working place in that entry and come back out, sometimes up No. 8 room in the 2d left, sometimes out on to the main slope into the 2d left, and sometimes go to the cabin about midnight. After midnight I generally went into the 2d right to some places working there, and come out and go wherever I thought it was necessary for me to go, anywhere the balance of the night.

Q. Did you state what your position was there at that time?

A. Night mine foreman.

Q. And you were mine foreman of the mine the night prior to the explosion?

A. Yes, sir.

Q. How long had you held that position?

195 A. Six or seven weeks.

Q. State whether or not on your journeying through the mine on the night which you have just related you took notice of the condition of the air and the ventilation of the mine at the various places visited by you in the White Ash mine and particularly in the 4th left entry of the mine?

A. Yes, sir.

Q. What was the ventilation, good or bad?

A. Good.

Q. Tell the jury, now, when you know when air circulation in the White Ash mine is good?

A. As mine foreman traveling through the working places of the mine, conversing with the miners in their working places, hearing no complaint from them and from actual tests made by my pit lamp in my hand at the end of the brattice in each working place and in cross-cuts from room to room, and in cross-cuts from back entry to main entry.

Q. That is the way you would ascertain that the ventilation was good?

A. Yes, sir.

Q. Was that part of your duty in the White Ash mine on the night prior to the explosion?

Objected to.

Q. What was your duty with reference to inspection of the air in the White Ash mine on the night prior to the explosion?

A. To examine in all of these working places the condition of the

brattice in each place and the condition of the air going around the brattice, the condition of the trap-door, curtains on the
196 main entries, cross-cuts and the actual route that the air traveled.

Q. Do you remember whether or not on the night prior to the explosion you inspected the air course or the ventilation in that mine from room No. 1 turned off of the 5th left where it connected with the 4th left back entry?

A. Yes, sir. That was one of the principal places to try the air with a naked light. With permission of counsel I will mark that point X upon the map.

Q. I will ask you to state what was the condition of the air at the point where room No. 1 of the *2th* left connects with the 4th left back entry on the night prior to the explosion, good or bad?

A. Good.

Q. I will ask you to state whether at any time during the night prior to the explosion you were in the last cross-cut between the main and back entries of the 4th left?

A. Yes, sir.

Q. Was that a part of the air course or not?

A. The last cross-cut of the 4th left back entry connecting on the main entry?

Q. Yes.

A. Yes, sir.

Q. Did you inspect the air then?

A. Yes, sir.

Q. How was it?

A. Good.

Q. How was it with reference to the condition of the air at that point relative to every inspection you had made for every
197 night prior to the night of the 26th day of February, 1895, for two weeks?

A. There was no perceptible difference.

Q. Then how was it at the point X, being the point where room 1 of the 5th left is broken into the 4th left air course, for two weeks prior to the explosion?

A. There was never any difference there either.

Q. Were you up at the face of the 4th left main entry on the night prior to the explosion?

A. Yes, sir.

Q. How far was it from the last cross-cut between the back and main entries of that 4th left to the face of the 4th left?

A. About 100 feet I should judge.

Q. How was the air carried up from the last cross-cut between the main and back entries of the 4th left to the face of the 4th left?

A. By brattice.

Q. State whether or not the entire current of air passing through the 4th left air course was conducted up to a point near the face of the 4th left main entry, the entire volume of air coming into the 4th left back entry, was carried to the face of the main entry by this brattice.

A. Yes, sir, that is, it would be, except for the leakage through the curtain across the entry.

Q. Now, was this curtain which was used for the purpose of taking the air up to a point close to the face of the 4th left place nearer the lower side of the entry or the upper side of the entry?

198 A. The track would be along the lower side of the entry and the curtain just as close to that track as the pit cars would permit in operating it, and the top side of the entry was for the air to return in.

Q. This air coming from the 4th left air course would pass through a space, would it not, Mr. Kilpatrick, smaller in going to the face of the entry than was possible in passing through the entire main air course of the 4th left?

A. Yes, sir.

Q. And after the air has reached the face of the 4th left entry on its return down the 4th left it would occupy a much wider space, would it not?

Objected to as leading.

Q. Than the air—state whether or not the air after it reached the face of the 4th left main entry on its return down the 4th left main entry would occupy a much larger space, would it not, than it did in going up to the face of the entry from the last cross-cut between the back and main entry.

A. Well, the track on the——

Q. Answer yes or no whether there was more space in there between the curtain and the top of the entry than there was between the curtain and the foot of the entry.

Counsel for defendant withdraws that question.

—. How far from the top side of the 4th left main entry was this brattice which you said was placed beginning at a point at the last cross-cut, between the back and main entries of the 4th left up to a point near the face, was it the middle of the entry or was it to one side, and if so, to the lower side or to the top side?

199 A. The brattice would be on the top side, almost in the middle of the entry.

Q. State whether or not there was any difference in the dimensions of the back entry and the main entry of the 4th left as to height and width.

— ——.

Q. I will ask you now whether or not you made an inspection of the White Ash mine systematically during your employment as night pit boss in that mine.

Objected to as leading. Objection sustained. Defendant excepts.

Q. I will ask you to state whether or not—how often—I will ask you to state how many such inspections you made during your employment as night pit boss?

A. Every night at least once and sometimes at important points two or three times, just as I happened to be there.

Q. How often would you make the examination and inspections in this matter of ventilation?

A. Every night.

Q. Would you make, state whether or not you would make any inspections as to the presence of gas?

A. No, sir.

Q. If you were making inspections for gas what would you do?

A. I would have a safety lamp instead of the naked lamp, instead of the pit lamp.

200 Q. Did you ever make any inspections in the White Ash mine while you were night mine foreman for the presence of gas?

A. Yes, sir.

Q. When and where?

A. On the Saturday night preceding the explosion.

Q. Any men in the mine?

A. No, I took the fire boss's place on that night.

Q. State what you did.

A. I examined every working place in the mine with a safety lamp.

Q. This was on the Saturday night prior to the explosion?

A. Yes, sir.

Q. Were you in room 8 of the 4th left on that night?

A. Yes, sir.

Q. How did you happen to go into room 8?

A. Room 8 was a working place on Friday night and coming back to No. 6 room on the 4th left I naturally of course went through that room into 7 and 6 on to the 3d left back entry.

Q. Did you go up to the face of room 8 on that night?

A. Yes, sir.

Q. State whether or not there was any brattice or curtain in that room at that time.

A. Yes, there was brattice from the cross-cut up.

Q. In what condition was the brattice?

A. In good condition.

201 Q. Did you find gas at the face of room 8 on that night?

A. In the upper left-hand corner of that room as you go into the room, going into the room from No. 9, going up the track.

Q. At that time state whether or not there was a current of air passing through room No. 8 and around the curtain which you said was placed there.

A. Yes, sir.

Q. When afterwards were you in room 8, the next time after that?

A. On Sunday night.

Q. What time Sunday night, if you remember, were you in No. 8 and how did you happen to be there?

A. Some time in the fore part of the night between 7 o'clock and midnight, just exactly the hour I could not say, two men were working there on Sunday night.

Q. Where were they working?

A. At the face of the room.

Q. Were the- working with naked lights or with a safety lamp?

A. They were working with naked lights, but had one safety lamp with them, between them for testing purposes for their own use.

Q. State whether or not you went up to the face of room 8 on that night.

A. Yes, sir.

Q. What was the character of the ventilation or air current passing through No. 8 room at that time as to being good or bad.

202 A. It was good.

Q. What function was it performing, if any, with reference to the gas which you said was being generated in that room?

A. It was carrying off the gas that was being generated in that room.

Q. Did you know Mr. Deserant and his two sons?

A. Yes, sir.

Q. Do you know in what room they were working at the time of the explosion of your own knowledge?

A. Yes, sir.

Q. What room were they working in?

A. 17.

Q. How long had they been working in any room on that 4th left entry, if you know?

A. I could not say how long they were working there; I know they were working there the week preceding the explosion on my shift, the night shift, and that they were men that didn't change rooms unless the room is finished, or something like that, and where you find them this week you will find them two weeks from that, when they come back to your night shift.

Q. State whether or not, Mr. Kilpatrick, in your capacity as night foreman, you ever had any occasion to perform any services for any one of the three Messieurs Deserant with reference to the air circulation in the room in which they were working, and with reference to any gas in the room in which they were working?

A. Yes, sir.

203 Q. When and what was it?

A. On the week before the explosion the oldest boy requested me in going my rounds, of the 4th left entry, to get into their place to take a safety lamp that the fire boss had given them when they came into the mine, and test a cross-cut that they were driving to connect 16 room. I took the lamp and showed him that there was a little body of gas perceptible in the lamp in that cross-cut, and got a piece of canvas and brushed it out for him, then tested it again and showed him there wasn't any, and told him to go ahead and work in there and try to put it through.

Q. Who was working in there with him at that time?

A. His father and the little boy.

Q. State whether or not you know whether the Messrs. Deserant were cognizant of the means used by the management of the White Ash coal mine to designate in a locality the presence of gas?

A. Yes.

Q. Were they or not?

A. They were. In asking me to take that safety lamp was positive proof that they were cognizant of the means used.

Q. In making your inspection of the various working places in the White Ash coal mine in your capacity as night foreman, state whether or not it was your universal custom to measure the air or to test the air, at the last cross-cut between the top and main entries of the 4th left?

Objected to as leading. Objection overruled. Plaintiff
204 excepts.

A. Yes.

Q. Now, I wish you would tell the jury what function or duty is performed by the air current in parsing through the various working places of the 4th left?

A. It furnishes respiration for men and mules, carries off any powder smoke from shots, and noxious vapors that may be generated in the mine.

Q. Now, do you know when the miners fired their shots in the White Ash mine on your shift, what were the regular appointed hours of firing on your shift?

A. For entries, except the 6th left entry, 9 till half past nine o'clock, 12 o'clock till half past 12, 3 till half past 3, and five o'clock.

Q. Why do you except the 6th left?

A. That was in a fault and had the privilege of shooting at any time, if my memory serves me right.

Q. What kind of powder were they using in shooting this fault?

A. Mostly dynamite and giant powder. Rooms shot at dinner time and five o'clock except a room turning which had the same privilege as an entry had.

Q. Do you mean by dinner time 12 o'clock at night?

A. Yes, sir.

Q. Whose business was it to see that these hours of firing were complied with?

A. My business on the night shift.

205 Q. Do you know what a windy or gunning shot is?

A. Yes.

Q. Tell the jury what a windy or gunning shot is.

A. A hole drilled in the solid coal five or six feet, that is taking too large a grip of the coal and is charged with an insufficiency of powder or not properly damped will blow out the tamping or the powder come back in a sheet of flame out of the drill-hole and leave the coal the same as if it had never been shot.

Q. Were these kind of shots of frequent or infrequent occurrence in the White Ash coal mine?

A. They were of very rare occurrence.

Q. Do you know how much powder was accustomed to be handled and used by the miners working in the 4th left entry on your shift?

A. Well, each two men working in a room would probably shoot four shots in the night, two at 12 o'clock and probably 3, and one

or two in the morning going home; they would have from 20 inches of powder to 2 feet, with a 2½-inch hole, in all about 8 feet of powder to the shift, about a foot to the pound, making 8 pounds.

Q. How was powder taken into that mine as far as the miners themselves were concerned?

A. In 25-pound kegs.

Q. State whether or not the night shift would leave its powder in the mine, what remained, after they went off work?

A. Yes, sir.

206 Q. Would that be also done by the day shift when they would go off work?

A. Yes, sir.

Q. Do you know what would be the effect of a windy or gunning shot upon the powder in the mine in the event of contact with flame from such a shot?

A. If the powder was in a powder keg and the flame got into the powder it would explode; if the powder was laying out of the powder keg on a piece of paper or something, it would simply add to the flame, but if found in the keg it would explode, the keg would explode with the powder.

Q. What effect does the explosion of powder have upon a 25-pound keg when it is exploded from the inside of the keg?

A. I have never made any investigation to find what effect it would have, but I have seen powder kegs rent asunder, torn all apart, that had had powder in it.

Q. Do you know what the effect is upon a powder keg from the explosion from the outside of the can, whether from powder or gas, or any other combustible or explosive of that kind?

Mr. FIELD: Object to that question because it does not give the witness enough of the elements of an explosion to enable him to answer intelligible.

Objection overruled. Plaintiff excepts.

Q. What effect would it have on the can, can you say?

207 A. It would just depend upon how much it was, throw the can around, it would bend it up, if it threw it against anything.

Q. Who was the judge, Mr. Kilpatrick, at the time you were mine foreman, of how a hole should be drilled and tamped and of the amount of powder which should be used in the firing of shots to knock down the coal in the rooms in the White Ash mine?

A. The miners themselves.

Q. Do you know what was the ordinary and usual size of cartridges used by the miners in the White Ash mine?

A. Well, the Hoosach drilling machine, the machine used by most of the miners, when the bits are just from the blacksmith shop, that is sharp, there is a bit on them that will make a hole of 2½ inches in circumference. The miners have a cartridge stick that they wrap paper on to make their cartridges.

Q. So that 2½ inches in diameter or 2½ inches in circumference would be the size?

A. Well, a cartridge stick, you would probably get your hand around, and the cartridge would go into their drill-hole.

Q. What time did you leave the mine on the morning of the explosion?

A. Went on a trip a few minutes before 5 o'clock from the cabin.

Q. What was the condition of the White Ash mine so far as safety to people working in it was concerned, and as to the air circulation therein at the time you left it on the morning of the explosion?

208 A. It was good.

Q. Now, whose duty was it to make examination, if any, as to the presence of gas in that mine?

A. The fire boss'.

Q. Who were the fire bosses at that time?

A. William Ray on the night preceding the explosion, and John Deighton on the morning of the explosion.

Q. What time, if you know, did Deighton go to work on the morning of the explosion?

A. Some time between 2 and 3 o'clock, I believe.

Q. Did you see him that morning?

A. I believe I saw him 2 or 3 times that morning at different places, but just where I cannot remember now. I generally seen him almost every morning, whichever fire boss it was, seen him probably two or three times.

Q. What was he doing, if you remember, at this time when you saw him?

A. He was going around the mine in his own way, with a Davy lamp in his hand, going whereever he thought it was a proper place for him to go.

Q. What were the duties of the fire bosses in the White Ash mine?

A. To make an inspection of each working place in the mine, and to stop at the cabin on the 2d left or above the 2d left on the main slope, and inform every miner that went into work as to the condition of his place, and if he had found any gas in it to give the miner a safety lamp out of the cabin and tell the miner

209 how much gas was in that place, to brush it out himself, if any brattice was necessary to tell him to wait until he would come and he would put up the brattice, or the foreman would come down—I always made it a custom to say "How is everything?" and whoever the fire boss would be he would tell me. I never got any other answer than "Everything is all right," that I remember of. And after the men had gone to work he would go wherever brattice was necessary to be put up, put it up, look over his curtains on the main entry, fix anything that was necessary on the trap-doors, and before he went off shift he generally cleaned a few lamps, whatever were dirty in the cabin.

Q. How long, Mr. Kilpatrick, would it take the fire boss to make the trip of inspection through the White Ash mine on the morning of the explosion as well as on the night before the explosion?

A. 3 or 3½ hours, from 3 hours to 3½ gave him plenty of time.

Q. State how fire bosses would indicate to miners working in the mine a dangerous place, or the presence of gas.

A. You mean with reference to the cabin, or at the place?

Q. At the place wherever there would be any danger.

A. They would throw either a tie or a piece of board across the track, or mark on the shovel the miner loaded the coal with, whatever would be most convenient, a sign, an X or a XX, X if there was a little there sufficient to ignite, XX if there was
210 sufficient that it needed to be brushed out before they went in to work.

Q. Was there anybody else allowed to make these marks in that mine, besides the fire bosses?

A. No, sir; fire bosses or a man acting as fire boss, such as on Saturday night when I made the inspection. On Saturday night I would have the privilege of making these marks on these places if I considered them dangerous.

Q. What intimation or knowledge would the presence or appearance of these marks convey to any person working in the 4th left of the White Ash mine on the day of the explosion?

A. They would give to any miner working on the 4th left entry, or any one working on the 4th left entry, the intimation as to whether the room was making gas or not, whether there was a little gas in there or not.

Q. What would a miner do if he should come across a signal of that kind, any place in the White Ash mine?

A. If it was in his own place, his own working place in the mine, he would have had his instructions from the fire boss what to do, but in any other place he would have no business to go over the dead line at all, he would not go over.

Q. What marks, if any, did you see in room No. 8 of the White Ash mine an- the 4th left entry the last time you were in there, Mr. Kilpatrick?

A. There wasn't any marks except my own at a point about in the left-hand corner of the room, and the fire boss for Sunday night; they were there on the coal.

211 Q. Who were the two men that were working in that room on Sunday night?

A. John Hawthorne and John Holiday, were the names of the men working there on Sunday night.

Q. Where are they now?

A. Hawthorne is in Madrid, Holiday, I don't know where he is.

Q. When a fire boss would make his rounds of inspection, what, if any, marks would he put at the working or in the room, whether the same was good or bad?

A. His initials and the date of the month, such as for instance, the marks on the face of the room on the morning of the explosion would be J. D., 2, 27, '95, meaning John Deighton, 2d month, 27th day, 1895.

Q. What, if in the opinion of the fire boss, the place was not safe as to fire, what sort of a mark would he put up?

A. You mean if he found a little gas in that room, or any gas in that room?

Q. Yes, sir.

A. He would go back from the face a piece, altogether probably 20, 30 or 40 feet from the face, whatever he thought was proper, and put a tie across the track or piece of plank, mark his initials, date of the month and the year, and if there was very much gas he would put XX; if there was simply a little he would put X.

212 Q. State whether or not the full intent or meaning of that signal, and the custom on the part of the fire boss, was known to the men working in the White Ash mine.

A. Yes, sir.

Q. Where were you at the time this explosion occurred?

A. At my home in bed, asleep.

Q. Who notified you of the fact of the explosion, if anybody?

A. Some of the folks around the house; Mrs. Kilpatrick notified me, I believe, that there was something wrong with the White Ash mine; waked me up.

Q. What, if anything, did you do then?

A. Put on my clothes, got out of bed, went over to the White Ash as quick as I could to see what was wrong.

Q. Well, now tell what you did when you got there?

A. When I got there there were lots of men on top, quite a crowd of men on top of the mine, and the trip standing in the mouth of the mine. I got into the trip, requested the rope-rider to go down with the trip, went as far as the fire boss' cabin, got out there of the trip and got a safety lamp in the cabin and went down to the 3d left, and tried to get into the 3d left two or three times, as the trapper boy of the 3d left had told me that the driver of the 3d left, a personal friend of mine, had just gone in a few minutes before the explosion occurred with an empty trip. I tried two or three times to get into the 3d left with my night-shift boss driver, met him around

213 there some place on the 3d left or on the slope, and some others one or two was with us, three or four; we found we could not get in, and we came out and went down to the 4th left: we called a while in the 3d left for the driver, but could get no answer, and the damp in the 3d left was very strong just immediately inside of the door. And when we got down to the 4th left on the main slope there was quite a number of men around there offering suggestions, etc., as to how to get into the 4th left entry, that the explosion had occurred in there, and I think I made the suggestion that a curtain be put across the main slope and to leave a small opening on the road, on the right-end side of the slope as you go down from this curtain to the rib, open the trap-door on the 4th left main entry, and drive the after damp ahead of us with the pure air and go right in the main entry, bratticing the cross-cuts temporarily to the mouths of their rooms as we went. The fire bosses and miners standing around there generally went and brought canvas; I assisted them, I done what I could until I got into No. 10 room, I believe, on the main entry; when the superintendent came along I told him what we were trying to do and what had been told me regard-

ing the condition of the 4th left main entry as to after damp, and the reason for this canvassing in this form and going in here, and he requested me to go back out to the parting and attend to those stoppings that had been put in temporarily, get what men I possibly could find, if not doing anything, or where there was too many at one job to place them in proper position so that all the air
214 possible could be forced in behind them and make these stoppings permanent just as near as possible, and he proceeded with the work that had been carried on where I left. I made several trips to the top with the empty trip for canvas and lumber and boards for these stoppings and material, and when the bodies commenced coming out I went out with the trip with them.

Q. What superintendent was this that you spoke of?

A. Mr. Duggan. I showed Mr. Brown the return air course of the 4th left, that is, with regards to the split in No. 6 room, and the system of bringing the air down on the entry of No. 2 room, took it up the plane through these rooms, where No. 1 room was connected with the back entry of the 3d left, went up No. 8 room with Mr. Brown as far as the back cross-cut.

Q. State whether or not after the explosion you were in No. 8 room of the 4th left.

A. Yes. I was up as far as the top cross-cut of No. 8 room.

Q. The cross-cut between rooms 8 and 9?

A. Yes, sir.

Q. What was the condition of the brattice after the explosion, in No. 8 room?

A. The brattice was all knocked down.

Q. How long after the explosion was it that you were in No. 8 room, about how long?

A. Well, I believe it would be about two or three o'clock, between 2 or 3 o'clock some time in the afternoon.

Q. Do you know whether anybody had been in there before you since the explosion?

215 A. I don't know.

Q. Who went in with you to No. 8 room?

A. Well, there was four or five in the gang. Mr. Brown, Mr. McKinley and one or two others. I don't remember who they were. I had the Davy lamp and handed it to Mr. Brown, of course, he being the older man; I had a Glinny, what is known as a Glinny; it is a working lamp, not a test lamp. Mr. Brown went ahead of us with the Davy lamp. The room was very strong with after damp, except on the 4th left main entry where we had the main current of air coming in. Wherever you went except that, the after damp was terrible strong in the mine.

Q. Did you find any bodies in room 8?

A. We got as far as a body laying in the cross-cut, but we were unable to bring it back with us. We didn't even take time to see who it was, but afterwards, when the air got around that far, and the men got around to get these bodies out, we understood that the body lying in the cross-cut was Kelly's; I never saw it afterwards

until it was brought on the parting; these bodies all passed me on the parting.

Q. Did you find any ties in room 8 when you went in there after the explosion?

A. Yes, there was a tie with a fire-mark on it, almost in front of the cross-cut, a little bit below, if anything, to my best recollection, as we went up there. There were several other ties that had been torn up, and rails, loose rails, a sledge hammer and some tools laying there in the cross-cut.

216 Q. What was this mark on the tie which you have spoken of?

A. To the best of may recollection it was "W. R.," with a day and date, but what the day and date was, I don't remember. I remember the remark being passed at the time in my own mind, that that was Ray's fire-mark, that was Ray's initials.

Court adjourned till 9 a. m., 12, 13, '97.

Court met pursuant to adjournment.

Q. Were you working in the White Ash coal mine during the months of January and February, 1895?

A. Yes, sir.

Q. I wish you would describe to the jury just what was the process by which air was carried up to the face of the entry when you were driving an entry, and when that entry was being used there as an air course, and how you performed that work, in carrying the air up to the face?

A. We put the curtain across the main entry, right on the opposite corner of the cross-cut from the back entry, across the track of the main entry, then ran brattice parallel with the track up to within 6, 7, 8 or 9 feet of the face of the main entry, wherever the miners desired it, on the upper side of the entry, the track being on the lower side of the entry, behind the canvas on the top side, or this brattice would be the return for the air from the face of the entry.

217 Q. As compared with the size of the entry on which was the track what would be the distance between the curtain and the top of the entry and from the curtain to the lower side of the entry?

A. It would be greater.

Q. How much greater would the space be, and which would be the greater?

A. The track being on the lower side of the entry and cars going in and out there you would take up from five to six feet of space, the width of the entry being 9 feet, the return air course behind this canvas would be 3 or 3½ feet wide; you had to allow with the track for the width of the cars and the swing of the cars that were passing in and out so as not to come in contact with the lower side rib or with the brattice.

Q. Do you know what the length of axle of the cars was used in the White Ash coal mine at the time of the accident?

A. Six feet, probably measured on the inside of the car; there were bumpers on the outside.

Q. That is the length of the car, is it not?

A. Yes, sir.

Q. I am speaking about the width.

A. Well the gauge of the track was 3 feet 4, but as to the actual width of the car I don't know; I never measured it, but it was a 40-inch gauge.

Q. In driving the main and back entries of the White Ash mine, state whether or not cars were used for the hauling out of the product of the entries?

A. Why, certainly.

218 Cross-examination.

By Mr. CLANCY:

Q. Mr. Kilpatrick, yesterday when you were describing the course of the air through the mine you stated that in the 4th left entry the air was conducted to the face of room 18 by a brattice at or about the time of the explosion. Now, is it not a fact, that at that time, there was no brattice in that room, and that the room was just turned and was in only a few feet?

A. I know the room was turning; as to how far it was or whether there was actual brattice in there, I don't know, I am not certain, but I know if it was up any distance there would be a brattice, as that was the custom.

Q. Then you were describing the course of the air as you thought it naturally would be and not from a recollection of what it actually was at that time?

A. No, sir.

Q. Well, then, state whether or not there was or was not a brattice in that room at that time.

A. I don't exactly recollect, because it was an unimportant place being just turning.

Q. So you are not sure whether or not you are correct in saying that it was conducted to the face of that room by a brattice at that time.

A. No, sir; I'm not certain.

Q. In the same course which you gave yesterday, a little further along, you said that the air came down room 2 of the 4th left entry to the main entry and from there went up on the plane.

219 Now, is it not a fact, that the air came down room 2 to the lower cross-cut, went through that cross-cut into room 1 and through another cross-cut from there to the plane without going to the main entry at all?

A. No, sir, not to my recollection.

Q. Then this map does not correctly represent the course of the air?

A. I don't know what the map represents. I know what my memory represents.

Q. Let me call your attention to the map and see whether it does

not refresh your memory. This blue line represents the course of the air, does it not?

A. Yes; I suppose so.

Q. Look at room 2 on the 4th left entry. The air comes down room 2, does it not, according to this map?

A. According to the map, yes.

Q. And goes into a cross-cut into room 1 and then from room 1 it went through another cross-cut into the plane?

A. Yes, sir.

Q. And according to the map it didn't go to the main entry at all?

A. According to that blue line on that map?

Q. Now after examining the map what do you say as to the course of the air there?

A. The map is a matter of hand work and an error could be made by a pencil but I do not think an error would be made here on recollection.

220 Q. Within two or three weeks before the time of the explosion, did you know of any complaint from the men working on the plane about the condition of the air?

Mr. TWITCHELL: Objected to as improper redirect.

Objection overruled. Defendant excepts on the ground of improper cross-examination and matter not brought out on the examination-in-chief.

A. No, sir.

Q. Did you at any time during the month of February, 1895, know of an opening having been made through the stoppings in the upper air course on the 4th left entry which would have the effect of increasing the supply of air to the men on the plane?

A. Yes, sir.

Q. By whom was that made?

Mr. TWITCHELL: I ask for an objection to that former question, and the answer to it on the ground that it presumes a fact not in evidence; there is no testimony here that it was for the purpose of an increase of air to the men working on the plane or any other purpose.

Objection overruled. Defendant excepts.

Q. Did you at any time during the month of February know of an opening from room 6 into the back air course of the third left being stopped so as to turn the whole current of air down towards the plane instead of letting a part of it escape through that opening?

221 Mr. TWITCHELL: Objected to for the same reason, improper cross-examination, relative to matters not brought out upon the examination-in-chief, immaterial.

A. No, sir, I never knew that that was entirely stopped at any time. One corner of the curtain was always open, a little of the canvas across the neck of that room where it went through.

Q. That opening through the stoppings in the upper air course, did that remain open up to the time of the explosion, do you know?

A. Yes, sir.

Q. In giving your description of the course of the air through the 4th left entry of the mine, did you not base your description upon the assumption that all brattices and curtains were up and in their proper places and that there was no obstruction in the air course—it was on that theory that you described the course of the air through that entry, was it not?

A. I can't see where there would be any assumption. It was something I knew about. The air continues to travel through the mine, and if the brattice is not put up or will fall down by itself, it might be by a fall of rock or something, but that would simply make a break in the air, but the air would continue to travel just the same.

Q. In order that the air should go through that entry in the manner that you described it, all the brattices and curtains must have been in place and there must have been no obstruction in the air course, is that not the fact?

A. No, sir, it is not a fact.

Q. Do you mean then that, if the brattices and curtains
222 were not in proper shape and the air course was obstructed, the air would still circle just the same?

A. If the air course was obstructed entirely, the air would be shut off on the left side entirely, but if a brattice was down in any one particular place, and air travelled through the 4th left back entry into the main entry and through this place where brattice was knocked down or fell down or came down, the air would simply be cut off at that one place where the brattice was down and would take the shortest possible route to the next place.

Q. If the air course were partially obstructed the air would be partially cut off, would it not?

A. There being no obstruction below the 4th left at all, if there was one in the 4th left back entry the full volume of air would come into the 4th left, that belonging on the left side would travel from this partial obstruction in the 4th left back entry, with a greater velocity and probably with a loss by friction against this obstruction.

Q. You think then that the particular effect of the reduction in size of the air course would be to increase the velocity of the air, and that that would be the principal effect?

A. No, sir, necessarily by an increase in the velocity the principal effect would be the loss by friction.

Q. Then the full quantity of air would not be carried through to be furnished to rooms on the 4th left if there was such an obstruction, such a partial obstruction?

A. I, as one of the foremen in charge of that mine, had a
223 theory we worked on, a practical theory well known to every miner, that this brattice in a main entry or a back entry or a room that was turned that was only entry width, there was a nar-

rower return than there was of an intake, and the consequence was, we had a loss by friction in this place, but there was always a sufficiency of air to allow for this by measurements made by the proper officials by the anemometer.

Q. Now, Mr. Kilpatrick, that is no answer to my question. I asked you if with a diminution of the size of the air course from any obstruction the same quantity of air would pass through there as through an unobstructed air course, would it or not?

A. It would.

Q. A small air course would furnish just as much air as a big one?

A. Well, just depend how big it was or how small it was.

Q. Well, take an air course that is 9 feet wide and 5½ feet high, and with a roof having a dip of about 14 degrees, with an obstruction in that air course that did not leave more than 3 inches in height on the low side, and the obstruction extending several hundred feet, would it, in that obstructive condition, carry as much air as it would if it was unobstructed?

Mr. TWITCHELL: Objected to as improper cross-examination, this witness not having testified whatever to any such state of facts.

Objection overruled. Defendant excepts.

A. You assume that there was an obstruction in this 4th
224 left air course, that is dip—I want this information so that I can answer this question.

Q. I am not talking about the 4th left air course. I am talking about any air course obstructed in that way and ask you a question based upon that supposition?

A. If any air course on the left side had a check as described by you or an obstruction, it would act as a check on the air at the split on the main slope at the bottom of the mine.

Q. Now, answer my question.

A. I am trying to.

Q. I am not talking about the 4th left air course. I am talking about any air course obstructed in that way and ask you a question based upon that supposition.

The COURT: You can answer that yes or no, if you can. Then you can make any explanation pertinent to the answer and the question that you may see fit.

A. I can't answer yes or no; never have made any measurement on matters of this kind with an anemometer.

Q. Then you don't know whether it would or not?

A. I don't know except from practical tests with a naked light.

Q. Did you ever make a practical test with a naked lamp of the amount of air going through an air course obstructed as I have described?

Mr. TWITCHELL: Objected to as immaterial, for this reason: It is improper cross-examination in the first place, he not having testi-
225 fied that he ever did make an examination with reference to any such air course; there is no testimony before the jury that

there was any such air course in the mine obstructed as described by counsel, and for the further reason that it is calling for an opinion of this witness upon a state of facts which do not exist and of which there is no proof.

Objection overruled. Defendant excepts.

A. No, sir.

Q. Then you don't know whether it would or would not carry an equal quantity of air with an unobstructed air course?

A. I know from tests made with a lamp upon a brattice curtain in entries, that air travels with a greater velocity in narrow places.

Q. Now you answer my question.

A. I know from theory; from reading.

Q. Do you or not know that?

A. I have told you what I know. Repeat the question.

The COURT: Answer the question if you can, and if you can't, say so.

Mr. FIELD: He understands it perfectly.

The WITNESS: To suit myself probably, not to suit Mr. Field.

Q. Then you don't know whether it would or would not carry an equal quantity of air with an unobstructed air course?

A. It would conduct with greater velocity according to the reduction lost by friction.

Q. Then there would be some loss?

226 A. There would be some loss, according to all of my reading, and according to all of my study.

Q. Then it would not furnish an equal supply of air as an unobstructed air course, would it?

A. No, sir.

Q. Because there would be a loss by friction?

A. Yes, sir.

Q. In making your runs through the mine, as you described yesterday, did you always take the same course as the one you have described?

A. No, sir.

Q. That description was based upon what was your usual and customary course, however, wasn't it?

A. Yes, sir.

Q. At these visits, you would not undertake to describe any particular course that you took on any particular night?

A. No, sir.

Q. During the time that you were foreman, did you ever go through the 4th back entry in making your inspection of the mine?

A. Not through the entire 4th left back entry.

Q. Why didn't you go through that?

A. There had always been some water laying in a portion of that back entry, and it would be uncomfortable to travel through there and get your feet wet, and I avoided that portion of that back entry by going around it.

Q. Where did that water come from?

Mr. TWITCHELL: Objected to as improper cross-examination, nothing of that kind being brought out in the examination-in-chief with reference to the source of any water in that 4th left back entry.

227 Objection overruled. Defendant excepts.

A. From the workings above the 4th left back entry, working places, rooms, etc. That was a lower point than what these working places were.

Q. And it was therefore the natural place to which the water would run?

A. Yes.

Mr. TWITCHELL: Objected to as leading. Object to leading the witness in cross-examination in such way as that.

Q. Could any of that water have come from any of the workings above the 4th left?

A. Well, it could have soaked through the bottom underneath the coal, water coming down from the 3d left would lay in the back entry of the 3d left.

Q. What I wanted to know is whether there was any passageway by which water would naturally drain down from the 3d left into the 4th left?

A. No, sir, not any passageway.

Q. Nothing except what you have mentioned?

A. Not to my knowledge.

Q. That is by percolation as you have described?

A. Yes, sir.

Q. Was there any means provided for removing that water from the 4th left air course prior to the explosion?

Mr. TWITCHELL: Object to that question as improper cross-examination, nothing have been gone into with reference to the means of removing water from any part of the mine with this witness.

228 Objection sustained. Plaintiff excepts.

Mr. FIELD: We offer to prove by the witness that there was a means provided for removing that water, artificial means and that for a considerable time prior to the explosion it was not kept in operation or employed for that purpose.

Offer overruled. Plaintiff excepts.

Q. At the place indicated on the map by an X mark, at the point where room 1 of the 5th left was driven through into the 4th left air course, when you tested the air there with your lamp, did you make that test below the point where the air turned around into the air course or above?

A. I would always try it first in the back entry inside of the neck of room 1, back entry of the 4th left, where the neck was driven through on to the 4th left, and then on the outside of room 1 on the back entry out towards the slope as there was some air coming that

way, also through some places on the plane, then what was coming up room 1 inside of this neck, coming down in the neck.

Q. You would try it in three places?

A. Yes, the action of the flame would give me the information I wanted.

Q. When you were in room 8 on Sunday night who was working there, who were the men working there?

A. To the best of my recollection John Hawthorne and John Holiday.

Q. Do you know where they are now, these men?

229 A. Hawthorne is in Madrid working there, Holiday, I don't know where he is.

Q. Was that room finished Sunday night?

A. I don't know whether they finished it or not. I gave them orders to square the place up on that night, that is square the face right up, not to leave any butts standing out, to shoot these butts off.

Q. Did you find any gas there that Sunday night?

A. Yes, sir.

Q. How much?

A. On the seam on the top side of the room I filled a Davy lamp. The men were working there with naked lights.

Q. Didn't you find enough so that it entirely filled the lamp and exploded in the lamp as it will when it fills the lamp?

A. Yes, it cracked in the lamp. A small quantity of gas will do that if you hold it long enough.

Q. How long did you hold it in the gas at that time?

A. Until it cracked, then I took the lamp out of it. If it would simply make a cap on the blaze in the safety lamp then I knew that it was not going to fill, but if the gas in the lamp would blaze all through the gauze I would know that it was going to crack.

Q. Well, as soon as you put the lamp in the gas did it immediately begin to blaze all through the gauze as you say?

230 A. Well, I didn't hold it close to the roof very long until the lamp was filled and in drawing it down it cracked, of course.

Q. Wasn't it enough of an explosion to cause you considerable alarm at the time?

A. Why, no; a bit of gas cracking in a safety lamp would not cause me any alarm at any time since I was a boy.

Q. Did you go any further with your examination for the gas at that time?

A. No, sir.

Q. You made no mark—was the fire boss with you at that time?

A. Not that I remember of. There was no one with me except these miners and they were working and I took their safety lamp and went over to the corners to see what it was like and gave them these orders that I have described.

Q. That was not a sufficient amount of gas then to have the place fire-marked to keep men out?

A. No, sir, not in my own opinion, it would not be.

Q. How near to the face of the room was the brattice in room 8 at that time.

A. Well, anywhere from 10 to 15 feet, it ran up.

Q. Did you ever go into room 8 again after that Sunday night before that explosion?

A. No, sir.

Q. Did any fire boss report to you that there was gas there after that?

A. I don't remember that they ever did.

Q. You were the night pit boss, I believe?

231 A. Yes, sir.

Q. Who was the day foreman?

A. John Donohue.

Q. Was your position subordinate to his, or equal?

A. Subordinate to him.

Q. I understand that he was your superior officer, Donohue?

A. Yes, sir.

Q. Referring to the firing time of shots in the mine, did you ever know while you were there of shots being fired at a regular time, except in the 6th left, as you have described?

A. I met smoke once or twice, but I never could locate the shots in traveling around the mine. It might have come from the 6th, or some miner might have fired it in his place; some of them. I never knew of shots fired at irregular times.

Q. Didn't the miners in that mine have boxes in which they were required to keep their powder?

A. Yes, sir.

Q. And when a man on one shift went away and left any of their powder there, they left it in the box, didn't they?

A. Yes, sir.

Q. Now, if flame should get at powder on the inside of a keg, as you were asked on your direct examination, and caused an explosion which would rent the keg asunder, that would make a loud noise, report, would it not?

A. Well, the assumption would be that it would.

232 Q. Well, don't you know whether it would or not?

A. I have never been in the vicinity of a powder keg when it exploded.

Q. Don't you know from your experience as a miner that powder confined in any way when exploded will make a noise?

A. Yes, sir.

Q. Well, from that experience don't you know that powder confined in a keg would certainly make a noise when exploded?

A. Certainly it would make a noise.

Q. On your direct examination you testified with regard to the fire-marks made by the fire bosses, that they would put one cross if there was a small amount of gas and two or more if there was a dangerous body of gas?

A. Yes.

Q. Then there were in that mine dangerous places where there might be danger from gas; is that so?

A. At intervals the fire boss would find it necessary to put a double cross on a tie or something to hold men until he would come, such as when they were driving cross-cuts from one room to another. Sometimes at intervals he made one mark in a place when the place was merely generating gas. Miners understood these marks for them not to light that gas. Two crosses meant "Wait until I come; don't cross that line until I come" unless he gave them orders different when they passed him.

233 Q. Then a double cross was a warning to men not to go over the mark unless they afterward received permission or orders to do so?

Mr. TWITCHELL: Objected to; he has not so testified.

A. Orders or instructions from the fire boss to these miners.

Q. Well, might not a man properly cross such a mark in obedience to orders from a foreman or pit boss?

Mr. TWITCHELL: Objected to as improper cross-examination, if the court please.

The COURT: If the witness knows he can answer.

A. I never sent any one over a fire-mark with any orders as a foreman.

Q. Well, might not a man properly cross such a mark in obedience to orders from a foreman or pit boss?

A. No, sir; the miner would have to have an understanding with the fire boss, that is all.

Q. Would you say then, that a man employed by that company, that it was the duty of any man employed by that company, to disobey the orders of the foreman if he told him to go over such a mark?

A. Yes, I would say so.

Q. Then the fire boss is a superior officer to the pit boss, is he? And a man must choose to obey the fire boss rather than obey the pit boss?

A. As far as regards danger marks.

Q. Did you ever know of any man that disobeyed any orders of the pit boss who was not promptly discharged?

234 Mr. TWITCHELL: Objected to as improper cross-examination.

Objection overruled. Defendant excepts.

A. Yes, I knew of men disobeying orders of the pit boss and not getting discharged on this proposition.

Q. Then you have known pit bosses to order men to go over fire-marks?

A. Well, they were not orders; they were probably requests, that came under my notice at the time, and the question would be discussed, and the fact would come out that there was a fire-mark there, and the foreman would say, "Well if there is a fire-mark, don't go;" I myself as pit boss, have done so.

Q. They were not orders, then?

A. They were consultations between the boss and the miners, discussing as to work to be done.

Q. Then we will come back to the other question; have you ever known of men in that mine who refused to obey an order of the pit boss, who was not promptly discharged?

Mr. TWITCHELL: Objected to on the ground that it does not specify as to what kind of orders they were, and a conclusion may be drawn from a general question of this kind of a regular and general disobedience of orders. It is improper cross-examination.

Objection overruled. Defendant excepts.

235 A. Discharges were of rare occurrence. I never knew of any man being discharged while I was foreman.

Q. Did you ever know of any man refusing to obey the orders of the pit boss?

A. No, a man generally done as I asked him to. I never ordered, I simply requested as a foreman.

Q. On your direct examination you said that when you were in room 8 on Sunday night there were marks on the coal, one of which you had made, and one of which was made by the fire boss; which fire boss was it that left his mark there, that you saw Sunday night before the explosion?

A. Well, I believe both fire bosses' marks were along the top side rib where they had been made, that is where I made my mark. These marks had not been shot off.

Q. The marks then were not on the face or on the side of the room?

A. On the top side of the rib, wherever they could find a smooth place that would take the chalk.

Q. What was the date of your mark that you had put in there?

A. Well, Saturday night the 20th something, first or second, whatever date that was; it was Saturday after seven o'clock, between 7 and 9, or 10 o'clock, somewhere along there.

Q. Did you say that the men were all out of the mine that Saturday night when you were making that round?

236 A. There were no miners working there that night.

Q. Are you sure they were not working that Saturday night before the explosion?

A. Yes, sir.

Q. Are you, may you not have in mind the fact that they usually did not work Saturday night? And from that general regulation, have the impression that they were not working that particular Saturday night?

A. No, sir.

Q. As to this you have a distinct recollection?

A. Yes, sir.

Q. Was it not a part of your duty to keep yourself informed as to the condition of room 8 and of the air in that room between Sunday night and the time of the explosion?

A. Sunday night was the last night that that room worked. I have never anything further to do with it unless I got some special

orders from Donohue regarding such rooms as were finished. When that room was finished 12 was my first room in that entry.

Q. When you went into the mine after the explosion how long did it take you to get in as far as room 10 as you testified yesterday?

A. Well, something like 2 hours, I believe, between 2 and 3 hours to get in there. We were working carefully as we went along, so that life was safe ahead of us. That was the main object, not to lose any more men.

Q. The reason I asked you that, Mr. Kilpatrick, was be-
237 cause the way you stated it, you could not tell whether it was five minutes?

A. It took time to get in there.

Q. In taking the air into the 4th entry after the explosion you were compelled to brattice both sides of the entry, the cross-cuts on the right-hand side and the openings into the rooms on the other side, were you not?

A. Yes, sir.

Q. If you could have taken the air in through the back entry or air course you would have had only one side to brattice?

A. If the air had been taken in the back entry?

Q. I was thinking you could have taken it in the back entry——

A. Then we would have had a mix-up.

Q. If you could have taken it in on its regular course you would have been compelled to brattice only the cross cuts and on one side of that entry.

A. Yes, into the face of the back entry, that is all we were able to do.

Q. My question was very simple. Didn't Mr. Brown who took charge of that work attempt to bring the air up from the 5th left and take it into the back entry?

A. I don't know. I didn't see Mr. Brown until I met him along the main entry of the 4th left some place. Along about the 5th or 6th, some place; I didn't know where he had been or where he came from or anything else.

Q. When you went up into room 8 did you find the bodies of Flick and Kelly?

238 A. I saw the body of Kelly laying in the cross-cut. Flick I did not see; I could not stand it to go far enough to see.

Q. There was a good deal of after damp in the room and that was the reason you could not go further?

A. Yes, sir.

Q. Did that after damp extend down below the cross-cut where you found Kelly's body when you went in there?

A. Yes, it was right from the main entry from where we had canvassed the mouth of the room. It extended down to the mouth of the room. It was on the main entry that we had to drive it; it was all through the entry right to the trap-door.

Q. Did you see any other body there besides that of Kelly?

A. No, sir.

Q. When you went into the room you went from the neck of the room on the main entry up through the room, didn't you?

A. Yes, straight up off the main entry.

Q. Did you or not go within the cross-cut at all?

A. No, sir, that was the strongest point for the after damp. The after damp going with the air through that cross-cut.

Q. Did you find the body of Donohue?

A. I didn't find any body at all; I wasn't inside at the body; Kelly's body was the only one I saw as he had met his death; I was probably four or five feet from him, and went close and looked and said, "That's Kelly," and went back.

Q. You say he was in the cross-cut?

239 A. Laying in the mouth of the cross-cut off No. 8 room.

Q. Was he entirely within the cross-cut or partly in and partly out?

A. His feet was towards the room and they were just outside the rib, that is, probably six or eight inches outside. His body was laying all doubled up on the lower side of the cross-cut. I looked sideways at him to see who he was, that is the side of the face didn't strike me plain. He was lying as though he had fallen into the cross-cut from the room.

Q. Now, I think you said that you did see bodies as they were brought out at the parting or somewhere outside?

A. Yes, sir.

Q. Do you remember seeing Flick's body?

A. Yes, sir.

Q. Did you examine it to notice what its condition was?

A. I didn't notice any of them, just lifted the blankets off them to look and see who they were as they were carrying them from the cars that the driver brought them out in to the trap on the main slope. *They* were always three or four men there, and we would probably look and say, "Who is this?" There were probably a good many more there who had been working going in and out. The doctor was right there at that point.

Q. What doctor was that, the doctor employed by the company?

A. Dr. Donaldson. A dentist of Cerrillos was also there,

240 Dentist McKellar. When a man came out, what we called "knocked out," light-headed from after damp, these two gave him medicine to bring him around again.

Q. Were Flick and Kelly what are known as company men or contract men?

A. They were company men, men who worked by the day.

Q. That is the difference between the two. Company men are paid by the day and the others are paid by the amount of work they do?

A. Yes, and the others are paid by the amount of coal they dig, so much per ton.

Q. Well, some contract men are paid on some circumstances by the yard, are they not?

A. Yes, sir; there was yardage and tonnage also.

Mr. TWITCHELL: Objected to as improper cross-examination.

Objection sustained. Plaintiff excepts.

Q. Under whose immediate direction were Flick and Kelly employed?

A. Under Donohue's, in the daytime.

Q. Did you see whether or not Flick's body was burned, when you took the blanket up and looked at him to see who it was?

A. I don't remember that I did.

Q. Do you remember seeing Donohue's body when it was brought out?

A. Yes, sir.

241 Q. Do you remember from what you saw whether or not he appeared to be badly burned or not?

A. Yes, he seemed to — badly burned on the face, and as if he had been in considerable dust or some substance that had gone into the skin; he was black.

Q. You looked only at his face to see who it was?

A. Yes, took off the blanket and looked at him there. There were quite a number around him and it was quite a while before we could identify who it was, he was so black.

Redirect examination.

By Mr. TWITCHELL:

Q. In your cross-examination, Mr. Kilpatrick, you spoke about an opening supplying air to the plane-rooms. I will ask you to state whether or not that opening in any way interfered with the circulation and conduct of the air up to the face of the 4th left entry, and the rooms turned off of that entry.

A. No, sir.

Q. I will ask you to state whether or not at all times during the times that you were acting as night pit boss and at every time that you made an inspection for air there was a sufficient quantity of air passing around the face of the 4th left main entry and all of the rooms turned off of that entry through which the air passed.

Mr. FIELD: We object to the question as not proper redirect examination, being a matter that was gone over in the direct examination, simply reiteration.

242 Objection overruled. Plaintiff excepts.

Mr. FIELD: Objected to on the further ground that it calls for a conclusion and opinion of the witness.

A. Yes, sir.

Q. What was a sufficient quantity of air, if you know, at the face of the 4th left and through the rooms turned off of the 4th left?

Mr. FIELD: Objected to because it is not redirect examination.

Objection overruled. Plaintiff excepts.

A. My understanding from measurements made by——

Q. I am not talking about tests you made with your light.

A. It would be very noticeable on the blaze of my light on the 4th left cross-cut from the back entry to the main entry and I could not carry a light coming from the 4th left main entry behind the

brattice curtain on its return, I would not attempt to carry a light. I would go to the end and try it and it would show strong on this light at the cross-cut; then in the rooms it was not quite so strong on the blaze of light.

Q. Why would you not attempt to carry a light there, Mr. Kilpatrick, in that place you spoke about?

Mr. FIELD: Objected to as improper redirect examination and cross-examination of his own witness.

243 Objection overruled. Plaintiff excepts.

A. In that narrow place, the blaze would blow all over the lamp down the spout and probably burn my fingers. I would not go in there with a naked light in my hand. I would put it in my cap and walk through there. That is the kind of air that is passing through there.

Q. Do you mean that the velocity is greater?

A. The velocity of the air is much greater in there, yes.

Q. Now, you spoke of a loss by friction to a hypothetical question given you by Mr. Clancy, in making your inspections as to the air, and the manner which you did it. If there had been any material loss of air at any place in that mine could you have noticed it with your naked lamp?

A. No, sir; a naked light would not show; it would simply show you what your air current was, whether it was good or bad; it would not show you a material loss. The only way this loss can be shown is by the anemometor.

Q. And when you made these three tests at the back entry in the 4th left and at a place in room 1 of the 5th, state whether or not that test was satisfactory to you?

A. Yes, sir, it was satisfactory to me.

Q. State whether or not the course of the air at that time was in the direction of the face of the 4th left entry?

A. Yes, sir.

244 Q. I will ask you to point out on this map approximately the place where you made these tests?

A. At the point in the 4th left back entry.

Q. To this side of that cross-cut?

A. This cross-cut had a stopping in it; that didn't cut any figure. Out here marked "B" test of the air indication, marked A towards the main slope; then I took it in here near the neck of room 1 also. This would be the strongest point, the point "A" in the 4th left back entry.

Q. Mr. Clancy asked you some question about the gas in room No. 8 on Sunday night. I will ask you whether or not at the time you were there and detected this gas in your lamp the man Hawthorne and the man Holiday were working up against the face of the room?

A. Yes, they were working up against the face. What they were doing I don't remember; I know they didn't stop, they kept on working; they didn't sit down. I just simply gave them orders, went to the corner of the room and from that out.

Q. Were they working with naked lights, or how?

A. Yes, but where they had them I don't know, whether they had them in their hats or not. I know their safety lamp was hanging on a prop and I took it off the prop.

Q. How long had these men known that that room made gas, if you know of your own knowledge?

A. Well, I don't know; I don't just remember when they went in that room; I know that is where I found that that Sunday
245 night on change of shift. They came to me from a day shift before that.

Q. I will ask you whether or not at the time that you found this gas in the top corner, as to the condition of the air current passing around the face of that room, was it good or bad?

A. The air current was good at the corner of the canvas.

Q. What was it doing to this gas which was being generated there?

A. Carrying it off.

Q. I will ask you when you left room 8 on Sunday night, did you leave these men working there when you left.

A. Yes.

Q. I will ask you whether or not you left that room on a safe condition when you left there.

Objected to as leading. Objection withdrawn.

A. Yes.

Q. Now then, Mr. Clancy asked you in cross-examination what the possibility of accidents in dangerous places was in that entry and where gas was apt to be generated. I will now ask you whether or not the fact that there were apt to be dangerous places and places where gas was generated, was or was not well known to every person working in the mine on the 27th day of February, 1895, and for a month prior thereto?

A. Yes.

Q. Now, Mr. Kilpatrick, did you ever order a man over a danger signal in the White Ash mine without ascertaining whether or not it was safe to proceed in that direction?

246 A. No, sir.

Q. Did you ever hear of anybody being ordered over a danger signal until it had been ascertained that the place was safe?

A. No, sir.

Q. In your entire experience as a miner and as a pit foreman in every capacity you have ever worked in in the coal mines, did you ever hear of a man in an official capacity in a gas-y coal mine ordering anybody to go over a danger signal of the kind that was placed in room 8, or until it had been first ascertained that the place was safe?

A. No, sir.

Recross-examination.

By Mr. CLANCY:

Q. Mr. Kilpatrick, how long had you known that room 8 made gas, prior to that Sunday night, of course?

A. That entire entry?

Q. I am asking you about that room.

A. That room was known as one of our gasiest rooms. Every alternate room made gas, and 8 was one. It had been making it from a little piece above the cross-cut where we commenced to find it.

Q. From a little above the last cross-cut?

A. Yes, sir; it was about there when I started as night foreman in the White Ash mine, the room was about there some place, about that cross-cut to the best of my recollection.

Q. And so the men at work there had a safety lamp that night?

247 A. Yes, sir.

Q. Did you give them that safety lamp or had they got it presumably from the fire boss?

A. I didn't give it to them, they got it from the fire boss, that would be the natural way for them to get it.

Witness excused.

JOHN DEIGHTON called and sworn as a witness for the defendant testifies as follows:

By Mr. TWITCHELL:

Q. State your name, age and business to the jury, Mr. Deighton.

A. John Deighton, age 33, fire boss.

Q. What was your business on the 27th day of February, 1895?

A. Fire boss.

Q. What had been your business during the months of January and February of that year?

A. Fire boss.

Q. Where were you fire boss?

A. At the White Ash mine.

Q. Were you day fire boss or night fire boss?

A. I was both.

Q. On the 27th day of February were you day or night fire boss?

A. Day fire boss.

Q. Do you know of anything particular having occurred at the White Ash mine on the 27th day of February, 1895?

A. Yes, sir, an explosion.

Q. What time did you go to work in your capacity as fire boss on the morning of the 27th day of February, 1895?

A. Somewhere about 3 o'clock.

248 Q. Now, state what you did, Mr. Deighton, in your capacity as fire boss on that morning, as you remember it now.

A. I examined all the working places before the miners went in.

Q. When you say "before the miners went in," state whether or not you mean the miners who were working in the 4th left entry of that mine, on the day of that explosion.

A. Yes, sir.

Q. Do you remember now, the various places where you went in your inspecting tour on that morning?

A. In the 4th left, in the main and in the 4th left as well. I went into them all that was working on the 4th left.

Q. Well, what did you do when you entered all the working places on the 4th left?

A. Examined them and looked for accumulations of gas.

Q. State whether or not you marked any place in the 4th left in your capacity as fire boss on that morning.

A. I don't remember.

Q. Do you know where room 8 is of the 4th left?

A. Yes, sir.

Q. When were you last in room 8, and what did you do there before the explosion?

A. Monday morning. I examined it, found gas, put a mark up there.

Q. What kind of mark did you put, and where did you put it?

249 A. I put a danger mark above the last cross-cut.

Q. What kind of danger mark was that?

A. It was a tie.

Q. What, if anything, did you put on the tie?

A. Initials, fire, danger.

Q. Any crosses on that tie?

A. Yes, sir.

Q. How many crosses did you put on the tie?

A. I don't remember now how many crosses there were.

Q. Did you notice the air current at the time you were in room 8?

A. No, sir; I don't remember.

Q. How far up in room 8 did you go?

A. Pretty near to the face.

Q. What was the condition of the brattice in that room at that time on Monday morning when you were there?

A. Good.

Q. Were you up at the face of the 4th left entry on that morning?

A. Yes, sir.

Q. Were you in room 17, 16, 15, 14, 13 and 12 on the morning of the explosion, that you made your inspection?

A. Yes, sir.

Q. And in room 12, 11 and 10?

A. I don't remember whether I was in them or not; no I don't think I was.

Q. I will ask you what was the condition of the brattice in these rooms, if you remember, in the rooms that you were in?

250 A. Good, as far as I can remember now.

Q. Were you at the last cross-cut between the back entry and the main entry of the 4th left?

A. Yes, sir.

Q. How was the air conducted from that last cross-cut up to a point close to the face of the 4th left main entry?

A. By canvas brattice.

Q. What was the condition of that canvas brattice at the time you were there on that morning, as to being good or bad?

A. I don't remember—there is room from at 185—I think that the canvas was a little down from the roof, that is all.

Q. I asked with reference to the canvas going up the entry to the face of the entry, was that canvas in good or bad condition?

A. It was in good condition.

Q. About what time in the morning, Mr. Deighton, was it that you were in the rooms of the 4th left? The morning prior to the explosion on the date of your last inspection.

A. Well, it was about half past five.

Q. I will ask you whether or not there was any fire-damp in that entry that morning or in the rooms on that entry?

A. There was so, a little in two rooms there, but I forget which of them it was now.

Q. Will you state whether or not you made an inspection, if you remember whether or not you made an inspection after the fire?

A. I usually stopped at Maley's place—I can't remember.

251 Q. I will ask you to state whether or not you were on the plane of the 4th left entry on the morning prior to the explosion when you made your usual inspection?

A. Yes, sir.

Q. Can you state what the condition of the air was on the plane at the time you were there that morning as to being good or bad?

A. It was fairly good.

Q. Were you at the foot of the main slope at that time?

A. Yes, sir.

Q. Do you know what was the condition of the air there at the time you were there?

A. It was good.

Q. How long, Mr. Deighton, have you been a coal-miner?

A. 23 years.

Q. Where have you worked?

A. I started in England in Haswell colliery, Eldon, Morton, Ludworth, and Illinois, Pennsylvania, Colorado, and here.

Q. In whose employ are you now, Mr. Deighton?

A. The Victor Coal Company.

Q. Where is that?

A. Las Animas, Colorado.

Q. How long have you been working there?

A. Since last June.

Q. You are not in the employ of the Cerrillos Coal Railroad Co., now?

A. No, sir.

252 Q. What did you do after you had made an examination of the White Ash mine on the morning of the accident?

A. Came to the lamp-house.

Q. Where is the lamp-house in the White Ash coal mine, or where was it at that time?

A. It was on the left side above the second right.

Q. Well, when you got there what did you do?

A. I don't remember now whether we cleaned lamps that time or not.

Q. Did the miners come into the mine when you got there or did they come in after you got there?

A. They came after I came.

Q. What, if anything, was it your duty to say or do in your performance of your business as a fire boss to miners coming into the mine after you had gone to the lamp station subsequent to the inspection of the property?

A. They asked me how their places was and I told them the condition of it.

Q. Every miner coming into the mine would ask that question and you would state it to them?

A. Yes, sir.

Q. Do you remember the miners coming into the mine on that morning?

A. Yes, sir.

Q. Can you state, Mr. Deighton, how many times during your occupancy of the position of fire boss you had occasion to put up danger signals in the rooms on the 4th left entry?

A. No, sir.

253 Q. Can you state approximately how many times, you had occasion to put up danger signals on the 4th left entry?

A. I judge on the average of about three or two.

Q. Do you mean two or three at every inspection?

A. Yes, sir.

Q. Now, what was the character of these danger signals which you were accustomed to put up? Describe them to the jury thoroughly?

A. I put a tie down on the track and put my initials and Fire, Danger, and an X.

Q. What was the object in putting the tie down on the track?

A. To let the miners know there was gas there.

Q. How long, Mr. Deighton, had you worked in gas-y mines?

A. I worked seven years in the old country, and I judge six in Las Animas county, Colorado, that is prior to the explosion here.

Q. As compared with the White Ash mine were the mines in which you had worked which were gas-y more or less gaseous than the White Ash mine?

A. There was three with more gas.

Q. Where were they?

A. Haswell, Morton and Ludworth in England.

Q. Did you know Mr. Deserant and his two sons?

A. Yes, sir.

254 Q. State whether or not you ever had occasion to put up danger signals in any room in which they were working?

A. Yes, sir.

Q. Where was that and when?

A. 17 room, I think it is.

Q. And when?

A. I remember the week.

Q. Tell the jury what you did when you put up this danger signal and where it was and all about it with reference to Mr. Deserant and his two boys.

A. I put curtain up on the entry and drove the air up in their place.

Q. What was that for?

A. To drive the air up into their room.

Q. How did it become necessary to drive the air up into their place?

A. There was a little gas in there.

Q. I will ask you, Mr. Deighton, whether or not, of your own knowledge the Messrs. Deserant were familiar with the signals and marks used by you and the other fire boss to indicate danger or the presence of gas?

A. Well, I think *he* was.

Q. Now, we will return to the miners going to work in the mine in the morning. When you told the miners that their places were unsafe and were marked what would you do so far as their work was concerned?

A. I would give them a lamp and tell them just the condition of their places.

255 Q. What kind of a lamp would you give them?

A. A Glenny lamp, safety or a Davy.

Q. Well, supposing that you had ascertained in your inspection that a place was making gas and was in your opinion a dangerous place, what then would you say to the miners whose work was in that particular locality?

A. I would tell him to get it out; how to brush it out.

Q. Would you ever render them any assistance yourself?

A. Yes, sir, sometimes.

Q. What was you- business, Mr. Deighton, with reference to the curtains and brattices?

A. It was my business to put them up.

Q. I will ask you whether or not in the performance of your duties as fire boss of the White Ash mine you did or did not perform that duty as you were called upon to perform it?

A. I did.

Q. Now, I wish you would describe to this jury, and I do this because I want the jury to understand it thoroughly, with the use of this lamp here, just how you would detect the presence of gas in a room?

A. When I went into a room I would go to the high side of the room. This here (referring to Davy safety lamp introduced in evidence) is a lock to lock it with. They carried the light about this

high. When I went into a room I always went to the high side or to the highest place in the room and raised it up and if there
256 was gas there it would draw the light, and then I would put it out and see where the edge of the gas was.

Q. Well, what would be the result if you found any gas so far as the lamp was concerned?

A. I put the danger signal up there.

Q. Well, if you were to find gas in a room would you also put—state whether or not you would also put a danger signal on the coal where the men would be apt to find it.

A. I would put the date up there very often while I was trying gas, I would be putting the date on the coal.

Q. Supposing, Mr. Deighton, that you would discover gas in a room or in a place where there was no railroad track or any ties or anything of that kind upon which to make the marks which you said you made, how would you indicate the presence of gas if you found it, so that the miners would know where it was?

A. Put the danger signal up just the same.

Q. Put it where?

—. ——.

Q. Put it at the last cross-cut on the coal?

A. No, sir, on a tie.

Q. You don't understand me. Supposing that there was no tie there to use for the purpose of putting the danger signal on, then where would you put?

A. I would have to get something to put it on there.

Q. Would you do that?

A. Yes, sir.

Q. Where were you at the time the explosion occurred, Mr. Deighton?

257 A. In the second left.

Q. What were you doing there?

A. Putting up a curtain.

Q. After you were in the rooms on the 4th left on the morning of the explosion, state whether or not you were up at the face of the 3d left?

A. Yes, sir.

Q. What was the condition of the brattice and curtains in the rooms of the 3d left and up at the face of the 3d left?

A. I don't remember now.

Q. Were you in the 5th left on the morning of the explosion?

A. Yes, sir.

Q. Was there any brattice or curtains there?

A. I think there was in the entry.

Q. Do you remember what their condition was?

A. It was good there.

Q. Did you know John Donohue?

A. Yes, sir.

Q. How long had you known Mr. Donohue?

A. 20 years.

Q. Where had you known him?

A. I knew him in Las Animas county, here, and in England.

Q. Had you ever worked with him before working with him down in the White Ash?

A. Yes, sir.

Q. What was his position in the White Ash mine, at the time of the explosion?

A. Mine foreman.

258 Q. Had you ever worked with Mr. Donohue in England?

A. No, I never worked right with him, but I worked right close to him in the same mine.

Q. Well, from what you knew of Mr. Donohue, are you able to state whether he was a careful and competent man for the position which he held?

A. Well, I think he was.

Q. Who were the judges of how coal should be mined in the White Ash mine?

A. The miners themselves, I think.

Q. Who were the judges of how holes should be drilled and tamped and the amount of powder used?

A. The miners.

Q. Can you tell how much powder men working in the 4th left would have at any one time at any one place?

A. No, sir, I don't remember.

Q. About how much powder would two men working in a room, have on hand at any one time?

A. Well, they bought it between them, would bring in a keg when one was finished.

Q. Now, after the explosion was over, who notified you of the fact that there was an explosion when you were up on the second left?

A. The force of the wind.

Q. What did you do when you ascertained that there had been something unusual happening in the mine from the force of the wind?

A. Went down the slope.

Q. What did you do when you got down the slope?

259 A. Well, I went into the 4th left parting, I seen some men going in there, two or three, I seen the trapper was laying on one man's arm.

Q. Was that door at the parting when you got there open or closed, if you remember?

A. I don't remember now.

Q. Well, what was done there and who was doing it?

A. Well, I went down below to the 5th left, and I went up to the lamp-house and got some lamps and then went down to the 5th left, opened the door in the 5th left to try and get air up there to get up the back air course to get in there.

Q. Well, what did you do then?

A. We could not get it in there for the damp. We came back then and started into the 4th left, put a brattice across the main slope and put curtains across the mouth of every room and took fresh air in that way.

Q. Who did that—who was with you?

A. Why, there was Brown, Ray, Kilpatrick, and several others that I—Mr. Duggan I think, too.

Q. Did you notice the condition of the stoppings between the main and back entries of the 4th left after the explosion?

A. Yes, they were blown out.

Q. Where were they blown to?

A. They were scattered all around there.

Q. Now, in carrying the air into the 4th left main entry, which you are now describing, did you put up as you went in there just canvas across these cross-cuts? Did you put any board stoppings?

260 A. We didn't put any canvas up in the cross-cuts, no, sir, it wasn't necessary.

Q. Where did you put up the canvas?

A. On the mouth of every room.

Q. Then you just stretched canvas on the top side of the main entry, did you?

A. Yes, sir.

Court adjourned till 2 p. m.

Court met pursuant to adjournment.

Q. The last time you were in room 8 was what day?

A. The 25th, Monday morning.

Q. How does it happen that you didn't go back there again between then and the time of the explosion?

A. Well, I considered it an abandoned room and had the necessary mark up there.

Q. Now, I will ask you, Mr. Deighton, what was the general condition of the White Ash mine on the morning before the explosion after you had completed your inspection, as to ventilation, the condition of the brattice, the general condition of the property, was it good or bad?

A. Good.

Q. Now, after the explosion was over—this morning you were testifying with reference to the carrying of the air into the 4th left main entry and of curtaining all the necks of the rooms on the top sides of the entry—when you went down there first, did you notice the door at the parting in the 4th left?

A. That door was closed.

261 Q. What was the condition on the inside of the door?

A. Why the room on each side was filled up with dirt.

Q. Were there any evidences of explosion or concussion at that place?

A. Yes, sir.

Q. Tell the jury what they were.

A. Well, there was a car off the track in the first place and the trapper boy lay in there just about dead, and on each side of the door was filled up with dirt.

Q. What kind of dirt?

A. Dust, principally.
Q. Coal dust?
A. I didn't examine so much as that to find out if it was coal dust.
Q. Well, about what quantity of this stuff was thrown up against these sides of the door?
A. Well, I judge three feet on each side, 2½ feet or something around there.
Q. Was that body of the boy on the inside of the door towards the face of the entry or on the outside of the door?
A. On the outside of the door.
Q. Where was this car; on the outside of the door?
A. Yes, sir.
Q. Now, go on and tell the jury, Mr. Deighton, just exactly what you did in the 4th left entry and the rooms turned off of it after the explosion, as you succeeded in forcing the air up to the face of the entry?
262 A. Why we didn't force it up to the face of the entry, Mr. Twitchell, right then.
Q. Tell just what you did.
A. We opened the door and went in and put curtains at the mouth of every room there, but in the first place we put a curtain across the slope and then went into about 10 room, I think it was, put a curtain across there and went through a cross-cut on to the back entry, and then put curtains on the cross-cuts between the two entries, and then went through a cross-cut through on to the main entry, and there we found a body.
Q. Whose body was it?
A. I think it was White's.
Q. Did you notice whether that body was burned or not?
A. No, sir.
Q. Well, then what did you do?
A. Why, I came out and sat on the back entry then, and Mr. Ray and some others went in there for another body.
Q. Do you know whose body that was?
A. No, sir. And then after they came out I went in again and found another body.
Q. Whose body was that?
A. I think it was Sweeney's.
Q. Did you notice whether that body was burned or not?
A. No, sir.
Q. What room was that in?
A. In 16, I believe.
Q. What evidence of explosion did you find in 16?
263 A. Found after damp there and a body.
Q. Where were the greatest evidences of explosion found by you at any time after the explosion happened in going through these rooms?
A. I don't know where was the greatest.
Q. Did you notice the condition of the props in any of these

rooms at any subsequent examination which you made in any of these rooms?

A. Yes, sir.

Q. What have you to say as to their being charred or not?

A. They were charred.

Q. In what room were they charred the most?

A. Well, it was up around 16.

Q. Now, at the time you and Mr. Ray and Mr. Brown and the rest of you were in there getting out bodies and after Sweeney's body had been taken out, where did you go and what did you do?

A. I got just about knocked out and had to go home.

Q. Knocked out in what way?

A. With the after damp.

Q. When was the next time that you came down there and went into that entry?

A. About 9 o'clock in the same night.

Q. Were any bodies taken out of the mine while you were there at that time?

A. Yes, sir.

Q. Who took them out? Did you take any of them out?

A. Yes, sir.

Q. Whose did you take out?

A. Kelly and Flick.

264 Q. Did you go into room 8?

A. Yes, sir.

Q. In which way did you get into that room?

A. From the mouth of the room.

Q. That is off of the main entry?

A. Yes, sir.

Q. Where did you find Kelly's body?

A. Right at the corner of the cross-cut, at the last cross-cut.

Q. Did you notice Kelly's body as to whether or not it was burned?

A. No, sir.

Q. What other body, if any, did you find in that room?

A. Flick.

Q. Where did you find that?

A. Opposite the cross-cut.

Q. Did you notice whether or not his body was burned?

A. No, sir, I did not.

Q. When you went into the room state whether or not you found any danger signals or marks of any kind.

A. No, sir.

Q. Where was Flick's body with reference to the railroad track in room 8 when you found it?

A. I don't remember.

Q. What was the condition of the brattice in room 8 when you went in there after the explosion at the time you brought out the body of Flick?

A. It was laying down there, some of it.

Q. From any examination made by you of the conditions
265 existing in these rooms and in the 4th left main entry, subsequent to the explosion, have you formed any opinion as to the cause of that explosion?

A. No, sir.

Q. State whether or not from your examination of the conditions existing in these rooms and in that back entry, you have been able to arrive at any satisfactory conclusion as to the cause of that explosion.

A. No, sir.

Q. Now, during the time which you worked in gas-y coal mines, I will ask you whether or not you were accustomed to the use of what is known as a safety lamp.

A. Yes, sir.

Q. How many years prior to your employment in the White Ash coal mine had you been accustomed to the use of the safety lamp?

A. Seven years.

Q. Did you ever work in coal mines where any other lamps except safeties were permitted?

A. Yes, sir.

Q. Where was that?

A. Haswell, Morton.

Q. Where is that?

A. In England. Then in Ludworth all miners used safety lamps, and in Eldon part of the miners used safety lamps.

Q. I wish you would describe just as minutely as you can, Mr. Deighton, the condition of the inside of that door frame in the 4th left main entry. I will ask you the prior question, Were any of the frames broken?

266 A. No, sir.

Q. Was there a latch on that door?

A. No, sir.

Q. Was it a door ordinarily swinging to and fro?

A. Yes, sir.

Q. I mean by that, would it swing into the entry and out?

A. No, sir; it would open against the frame of the door.

Q. I wish you would describe to the jury just how that door worked against this frame, as to whether it would swing out towards the slope or not.

A. It would when it was pulled out towards the slope by the trapper.

Q. And with reference to that frame, could it be opened in towards the face of the 4th left main entry?

A. No, sir.

Q. Then if that door had been closed at the time of the explosion, Mr. Deighton, what would have been the effect of the force of that explosion on that door?

A. I think it would have broken it.

Q. Was the door broken?

A. No, sir.

Q. Well, with that door being open, I will ask you whether or

not any air could come into the 4th left main entry through that door?

A. Yes, sir.

Q. Whose business was it to attend to that door, Mr. Deighton?

267 A. The trapper's, I suppose.

Q. State whether or not that was the boy that was killed at that place.

A. Yes, sir.

Q. State whether or not it was his business to keep that door shut.

A. It was his business to attend to the door, the drivers coming through, he had to open it.

Q. And when drivers were not going through what was his business with reference to that door?

A. To keep it closed.

Q. You spoke this morning about a portion of the brattice up near room 18 of the 4th left hanging down from the roof. I will ask you whether or not—I will ask you what effect that had, if any, upon the circulation of the air at that place?

A. Up to the face of the entry, you mean?

Q. Where you spoke of this morning.

A. The air would go over the top there more than it would if it was right up to the roof.

Q. Would that interfere in any way with the circulation of the air in rooms 16, 17, 15, 14, and 13?

A. No, sir.

Q. Do you remember how far up from the last cross-cut in room 8 the rails had been taken up in that room?

A. No, sir.

Q. What do you mean by finding a little gas, Mr. Deighton?

A. Well, a little pocket or a lamp full. It may be in a little pocket, a place where a little rock fell out, or anything like that.

268 Q. Well, is the accumulation of gas which you designate as a "little gas" a dangerous accumulation of gas?

A. No, sir.

Q. What did you mean by a hatful of gas or a lampful of gas? Among miners what is that understood to signify?

A. It is not considered dangerous.

Q. Mr. Deighton, did you notice any difference in the ventilation of the mine on the morning of the explosion when you made your inspection, than any other time that you made inspections for a week or two prior thereto?

A. No, sir.

Cross-examination.

By Mr. FIELD:

Q. Had you ever been fire boss in a mine before you were fire boss in the White Ash?

A. No, sir.

Q. Do I understand you to say, Mr. Deighton, that when you found a dangerous body of gas in the White Ash mine, and marked it with a danger signal, that you had performed your full duty with reference to that body of gas as you understood it?

Mr. TWITCHELL: Objected to. There is no statement made by this witness that he ever found a dangerous body of gas in that mine.

Objection overruled. Defendant excepts on the ground
269 that it is improper cross-examination, and a hypothetical question not based upon facts in evidence. Nowhere has the witness stated that he found a dangerous body of gas.

A. Yes, sir.

Q. It was no part of your duty to go back and take that gas out?

A. Sometimes it was.

Q. Well, then when you found a dangerous body of gas and marked it with the danger signal, you had not performed your full duty with respect to that body of gas, as you understand it?

Mr. TWITCHELL: Objected to; the same objection as before; not having testified in his examination-in-chief that he ever found a dangerous body of gas in that room.

Objection overruled. Defendant excepts.

A. Yes.

Q. You had nothing further to do with it then?

A. If I didn't know a man or know about his ability, I would go back with him and take it out for him.

Q. Was it a part of your business, as you understood, as one of the fire bosses of that mine, to keep gas out of the open places in that mine?

A. Yes, sir.

Q. Did you perform that duty as you understood it?

A. Yes, sir.

Q. You found a body of gas in room 8 on the morning of Monday, the 25th of February, didn't you?

270 A. Yes, sir.

Q. And you didn't go back there again?

A. No, I didn't go back.

Q. You knew that room 8 was one of the worst rooms in that whole mine for gas, didn't you?

A. Yes, one of the worst.

Q. Wasn't it the worst room in the 4th left entry for gas and known to you to be so?

A. Yes, sir.

Q. And you think that you performed your full duty as fire boss there when you marked that body of gas as you have described and did not go back again?

A. Yes, sir.

Q. It never would have been incumbent upon you to go back to

that place and to look at that fire-mark again no matter how long you stayed in *in* that mine, would it, Mr. Deighton?

A. Why, yes, I might have gone back and looked at it.

Q. Would it have been your duty to go back and look at it?

A. Yes.

Q. When?

A. Any time.

Q. Wasn't it your duty to go back the next day, and don't you know it was?

A. Well, it was an abandoned room and I had the necessary mark up there.

Q. Answer the question. Don't you know that it was your duty to go back to that fire-mark the next day?

A. Yes, sir.

271 Q. And every day until that gas was removed?

A. Yes, sir.

Q. And don't you know that it was your duty to remove that gas?

A. If I could.

Q. You could, couldn't you?

A. No, sir.

Q. No appliances in that mine whereby you could have removed that gas from there?

A. No, sir; I don't know if there was.

Q. As you understood your duty in that mine you had no right to remove that gas until somebody authorized you to do it?

A. No; I meant that I could not get it out, it was so far away from the cross-cut, and I had no authority to put in a cross-cut through to No. 9 room and drive it out of 8.

Q. Now, is it not a fact, Mr. Deighton, that from the amount of work that you had to do as fire boss in that mine and the time in which you were allowed to do it, immediately prior to this explosion, that you didn't have time to make any effort to get that gas out?

A. I had too much work, sure.

Q. Had you or not complained to the pit boss of the fact that you had more work than you could properly do, prior to the explosion?

A. Yes, sir.

Q. To whom?

A. To the foreman.

Q. Who was it?

A. Donohue.

Q. What, if anything, did Donohue say?

272 A. He said he was going to give us a man to help us.

Q. Did he do it?

A. No, sir.

Q. Mr. Deighton, you were asked about how the air was on the 4th left plane on the morning of the explosion. Do you know how the air was going to the 4th left plane that morning?

A. It was fairly good.

Q. Do you know which way the air was going?
A. It was coming up the plane into No. 1 room, through No. 1 and up the plane into the 3d left air course.
Q. Do you know anything about an opening on the upper air course to the plane, to let air into men on the plane, which did not go to face of the works in the 4th left?
A. I don't remember.
Q. An opening in a stopping, a board knocked off there, ten days or two weeks before the explosion, in the upper air course of the 4th left, which would let air into the plane from the parallel air course?
A. Will you allow me to look at that map?
Q. Certainly.
A. Yes, I remember a board being taken off there.
Q. Why was it taken off, Mr. Deighton?
A. To let the air into the plane.
Q. When, before the explosion, was the last time that you were through the 4th left air course from one end to the other?
273 A. I don't remember.
Q. Do you remember ever going through there while you were fire boss?
A. Yes, sir.
Q. Do you know whether you were through there within a month before the explosion?
A. I do not remember of being through there within a month.
Q. Do you know Ray, the fire boss — worked on the opposite shift from you, William Ray?
A. Yes, sir.
Q. Did you meet him down in the 4th left after the explosion?
A. Yes, sir.
Q. You met him up in the lamp-house, first?
A. Yes, sir.
Q. Did you have any conversation with him there?
A. He asked me what was the matter and I told him there was an explosion there, and where it was.
Q. Then what did you say?
A. I don't know.
Q. Didn't you say to him, "Billy, somebody has been in 8"?
A. I don't remember.
Q. Do you remember that you did not say so to him, Mr. Deighton?
A. No, sir.
Q. Now tell me, Mr. Deighton, if the first thing that came into your mind after you knew that that mine had blown up was not that somebody had gone into room 8 with a naked light?
274 A. I didn't know right then.
Q. I am asking you what the first thought had was?
A. Yes; that was my first thought.

Redirect examination.

By Mr. TWITCHELL:

Q. Mr. Deighton, did not every man in the White Ash mine and in the 4th left entry of the White Ash mine working there at that time know of the presence of gas in room 8?

A. I don't know if every man in the White Ash mine was. I know I have told lots of them.

Q. Did you tell the people working in the 4th left, in the particular locality of room 8?

A. You mean the men that were working in room 8?

Q. No; the men working in the various rooms there?

A. Yes; they about all knew it.

Q. Did Hawthorne and Holiday know of it who were working there?

A. Yes, sir.

Q. Did Flick and Kelly know about it?

A. I don't know, sir.

Q. Do you know of any other people working in the 4th left of your own knowledge that knew of the presence of gas in room 8?

A. No; I have no idea that I do know anybody that knew exactly about it, but I know that I told a good deal about it.

Q. When men would come into the mine in the morning would you tell them about the condition of the various working places?

275 A. Is that the place they were going to work in?

Q. Yes, sir.

A. Yes, sir.

Q. Did you ever put up any danger singals, fire signals, or anything of that kind in room 17 where the Deserants were working?

A. Yes, sir.

Q. Do you know whether or not they knew what that meant?

A. Yes, sir.

Q. Do you know whether Flick and Kelly knew what a danger signal of that kind meant?

A. I don't know. I never was very well acquainted with them and didn't know much about them.

Q. But every man working in the White Ash mine knew what a fire boss's signal was, didn't they?

A. Yes, sir.

Q. And when you had placed that signal over in room 8 and left it you considered that you had performed your full duty as fire boss, didn't you?

A. Yes, sir.

Q. And you had performed your full duty, had you not?

A. Yes, sir.

Recross-examination.

By Mr. FIELD:

Q. Did you think that there was a man that went into that mine to work on the morning of that explosion who knew or had any

reason to believe that 48 hours before you had discovered a
276 dangerous body of gas in room 8 on the 4th left and had not been back to that room since then?

Mr. TWITCHELL: Objected to as improper recross-examination, thoroughly gone into, and the very same question with the exception of one word as already been asked the witness on cross-examination.

Objection overruled. Defendant excepts.

A. No, sir.

Q. You reported that gas in room 8 to Donohue, the pit boss, didn't you?

A. Yes.

Rebuttal.

By Mr. TWITCHELL:

Q. Is it not a fact, Mr. Deighton, that in all gas-y mines gas is apt to accumulate in some particular place unlooked for at almost any time?

Mr. FIELD: Objected to as improper rebuttal examination.

Mr. TWITCHELL: I will ask it as a direct question, if the court please.

The COURT: Very well, go ahead; you can ask it as a direct question.

A. Yes, sir.

Q. Is it not also a fact, Mr. Deighton, that gas is apt to accumulate and that gas might have accumulated in room 8 within a very short period of time, even if you had been back there a dozen times and put on a dozen marks?

277 A. Yes, sir.

Q. And you considered that that danger mark which you put up there was a protection to everybody in the mine, is that not so?

A. Yes, sir.

Q. And you considered it as a protection to yourself, didn't you?

A. Yes, sir.

Q. And your danger in that mine was equal with everybody else's, is that not so?

A. Yes, sir.

Q. Your life was just as much at stake as anybody's, is that not so?

A. Yes, sir.

Surrebuttal.

By Mr. FIELD:

Q. Do you think your life was as much at stake as other people?

A. Yes, sir.

Q. Then how do you account for the fact that you are here today and that there were 24 men in that mine, who were in that mine that day, who are not here?

A. I didn't happen to be there.

Q. Was gas likely to accumulate unexpectedly in room 8 of that entry?

A. No, sir.

By Mr. TWITCHELL:

Q. You were just as apt to be in the 4th left entry as upon the 2d entry at the time that explosion occurred?

A. Yes, sir.

278 Q. And during the day that this explosion occurred your duties called you to all portions of the mine, is that not so?

A. Yes, sir.

Q. And it was just as possible for you to have been up there with Donohue or at the face of the entry as on the second left?

A. Yes, sir.

By Mr. FIELD:

Q. If you had been there with Donohue, Flick and Kelly would never have gone into that room with your consent with naked lights, would they, Mr. Deighton?

A. No, sir.

Witness excused.

ED SULLIVAN, called and sworn as a witness for the defense, testifies as follows:

By Mr. TWITCHELL:

Q. State your name and occupation to the jury.

A. Ed Sullivan, age 36. Do you mean my occupation now or at the time of the explosion?

Q. Both.

A. Driving at the time of the explosion and rope-riding now.

Q. Where were you working on the day of the explosion, Mr. Sullivan?

A. In the 4th left entry.

Q. At what particular business were you working?

A. I was employed driving a mule.

Q. What time did you go to work in the White Ash mine on that morning?

A. 7 o'clock.

279 Q. State whether or not, between 7 o'clock and half past 10 or just prior to the explosion you were up at the face of the 4th left entry.

A. I started at 7 o'clock and pulled two empty cars in the 4th left entry as far as No. 16 room. I pulled one car up 16 room and came back and hitched to my other car and pulled up 17 room. I then went into the face of the entry and got a loaded car and pulled it out to 18 where there was another loaded car standing on the entry. I coupled the two cars together and pulled them out to the slope. I then went across the 4th right plane, that is on the opposite side of the slope, and there was two men working on the plane and they wanted some cars. There was a loaded car on the plane switch. I

ran it down to the parting, coupled it on to the loads that was standing on the parting. I then pulled them up an empty car and waited until they loaded the car and ran the car down to the parting and pulled up another one so the two miners that were there told me they would let me know when they wanted another car. I say, "All right." I goes back to the 4th left. I had to wait in the 4th left about five minutes probably before the drivers came out. I was inside driving the 4th left that morning when these two drivers came out that were in there while I was in the 4th right, came out with their trips. I went down to the empty track and got two empty cars and took them in the first car into 18 room and the other car into the entry. I don't remember where I got my load. I got a load at 17 as I was coming out. I think it was 16 or 17. I think, as far as I can remember
280 now, that I had made about four or five trips. I would not be sure whether it was four or five, between 7 o'clock and 10.30, in the 4th left entry. When I came out about 10.20 or 10.30, Mr. Franklin, one of the men that was in the 4th right, he was in the 4th left parting and he told me that he would take a couple of cars. I says "All right." I just coupled on my two loads and went right across to the 4th right entry and I ran his load that was standing on the switch down to the parting. I then pulled him up an empty car and took my mule down to the 4th right parting and went right up and told him to hurry up and load the car. Well, I was only up there about five minutes until I heard some kind of a noise. I didn't know exactly at the time what it was and I hollers to the two miners that there was something the matter. They didn't hear me. They kept on loading the car until the car was loaded, and I ran that car down and pulled up another empty car, and when I pulled it up Harry Franklin said, he said, "There is something the matter," and he said, "We will go and see what it is." So we went across the slope to the 4th left and we met Mr. Merchant, the boss driver, who was on the slope at that time, and he asked me where I had been. I told him I was in the 4th right parting up across from the plane. I asked him where the trouble was and what was the matter. He said that he thought there was an explosion in the 4th left.

Q. Now, Mr. Sullivan, at the time that you were up by room 18, or the face of the 4th left entry, 20 minutes before this ex-
281 plosion, did you notice the air current or the condition of the air ventilation at that place?

A. Well, the air was going in there when I was in there at 9 o'clock or half-past nine.

Q. How was the air when you were up there the last time?

A. If I can remember it right now, when I went in at 9 o'clock they were going to shoot in the entry; they had a loaded car in at the time, and I told them not to shoot until I would get the car out. I don't know whether they shot before I got the loaded car out or not. I could not say now. I disremember. But I know when I was in there about 10 or 10.20 the air was all right in there.

Q. What effect, at the time or immediately after this shooting in

the entry, did the air have upon the dust and smoke following the shooting?

A. Well, the smoke was pretty strong for a while, but it didn't take it long to clear out.

Q. Well, it was carried out, was it?

A. Yes, sir.

Q. What kind of a lamp did you have in going up the 4th left that morning?

A. Well, I had an ordinary miner's lamp.

Q. Describe one of those lamps to the jury, what kind of a lamp it is, all about it, how much of a flame and what kind of a flame does it have.

A. Well, I should judge the flame of the lamp would be about an inch or two inches in diameter if it is burning right.

Q. Have you any recollection of what effect the current of air had upon that light as you were up in the entry at any particular place?

282 A. Yes, I remember it very well, that the blaze of the light was so strong in my eyes that I had to take the lamp off my hat in at the cross-cut when I went in with the car.

Q. Where did you wear that lamp?

A. I wore it on my cap.

Q. And you say the blaze was so strong in your eyes that you had to take your cap off?

A. No, sir, I didn't say I took my cap off. I took the light off my cap and held it in my hand.

Q. What do you mean by the blaze of the lamp in your eyes? Describe that to the jury.

A. Well, the blaze of the lamp, it burned in my eyes so strong that I could not see anything but the smoke and the blaze of the lamp, the two together.

Q. What caused that, Mr. Sullivan?

A. Well, I should think it was the draft of air that was there.

Q. And at what cross-cut was that?

A. That was the last cross-cut in the 4th left entry.

Cross-examination.

By Mr. FIELD:

Q. That was the last time you were in there before the explosion?

A. About 10.20, yes.

Q. The air was stronger then than you had noticed it at any time during the morning?

A. The air was the same then as it was any time during the morning.

Q. Did you have to take the lamp off any other time?

283 A. No, sir.

Q. Then it must have been stronger when you had to take the lamp off than when you did not have to take it off?

A. I was only in the cross-cut once before that, Mr. Field, before that that morning.

Q. How long before?
A. 7 o'clock, half past seven probably.
Q. How far was it from the cross-cut to the face of the entry?
A. Well, I did state in the last testimony that it was about 40 or 50 feet, but since then I have found it is further.
Q. Well, how far was it at that time?
A. At that time my statement was 40 feet.
Q. I don't ask you about your statement. I ask you now, if you know, to tell the jury how far it was from the cross-cut to the face of the entry at the time of the explosion without regard to your testimony at the last trial?
A. Probably 100 feet, probably 150; I didn't measure it, I could not exactly tell.
Q. Well, you have been making some inquiry, haven't you, Mr. Sullivan?
A. No, sir; only I have heard some witnesses state here that it was 100 feet.
Q. That is all you know about it?
A. That is all I know; yes, sir.
Q. Mr. Sullivan, did you see Donohue in the vicinity of room 8, when you made your last trip up that mine?
A. No, sir; I met Donohue inside the trap-door on the plane.
284 Q. When you made your last trip?
A. Yes, when I made my last trip on the 4th left.
Q. In what direction was he going?
A. Well, I think he was going in the 4th left.
Q. You mean the 4th left main entry?
A. Yes, he was standing on the plane switch.
Q. Did you see anybody in the vicinity of room 8 as you came out on your last trip?
A. No, sir.
Q. Didn't you see Kelly sitting at the neck of the room and Flick a little further up on the switch?
A. I seen Flick as I was going in once that morning, at the mouth of No. 8 room, but not as I — coming out.

Redirect.

By Mr. TWITCHELL:

Q. There is one question that I neglected to ask and I ask permission of the court to ask it. State whether or not, the condition of the air, as you found it, at 20 minutes after 10 on the morning of the explosion, was approximately the same as it had been for 15 or 20 days previous to that time, whenever you had noticed it at that place.
A. Yes.

By Mr. FIELD:

Q. It was no part of your business to know how the air current of that mine was, was it?
A. No, sir.

By Mr. TWITCHELL:

Q. You would know whether the air was good or not, would you not, Mr. Sullivan?

285 A. Yes, sir.

Q. And if you considered your life in danger, you would have done something with reference to the air circulation, if you — that was the cause of it?

A. Well, if I thought my life was in danger, I would not be in there at all.

By Mr. FIELD:

Q. You do not know of anybody else, do you, that would have been in there if they thought their lives were in danger?

A. No, sir, I suppose not.

Q. And you relied for your safety when working in that mine not, upon your knowledge of the conditions there, but upon the fact that the people that were employed by the company to protect your life, would do their duty, did you not?

A. Yes, sir.

By Mr. TWITCHELL:

Q. And that every other man in the mine would also perform his duty with reference to the rules and customs of the mine? Is that not so, Mr. Sullivan?

A. Yes, sir.

Witness excused.

JOHN HUNT, called and sworn as a witness for the defendant, testifies as follows:

By Mr. TWITCHELL:

Q. What is your name, age and occupation?

A. John Hunt, age 32, coal-miner.

Q. How many years have you been a coal-miner?

A. About 22 years.

Q. Ever since you were ten years old?

A. Yes, sir.

286 Q. In what countries have you worked as a coal-miner?

A. In England and America.

Q. What kind of work have you performed in coal mines?

A. Well, I think I have done everything in a coal mine now, except superintendent, and mine foreman.

Q. Well, what are the various occupations which you have performed?

A. Well, I started to keep a trap-door, driving, then "putting" as they call it, it is the same as driving; I ran inclines, I dug coal, I have timbered; I have caged coal; put the car on the cage and I have rid ropes, boss driver and fire boss.

Q. Have you ever worked in gas-y mines besides the White Ash?

A. Yes.

Q. Where?
A. I worked in England; I worked in Arkansaw, or Arkansas as they call it, Indian Territory, Colorado and New Mexico. I guess that's all that I know of.
Q. Do you understand the use of a safety lamp?
A. Yes, sir.
Q. When did you commence work in the White Ash mine?
A. Three years ago the first day of last May, I think, as near as I can remember, I know it was in May.
Q. Were you working in the White Ash mine on the 27th day of February, 1895?
287 A. I was from 12 o'clock on the 26th until about half past five in the morning of the 27th.
Q. That is, on the morning of the explosion when you quit work, was it?
A. Yes, sir.
Q. What particular occupation were you following in the White Ash mine at that time?
A. Boss driver.
Q. What was the duty of the boss driver?
A. Well, my duty was, I would go down there to the stable, see that all my drivers were there; if they were all there they would take their mules out and then when they would go down they got the harness of the mules and started to pull coal and I was there to look after them and see that the coal did come out. If they got off the track I would help them on. If we were waiting on coal the rope-rider and hustler would go down and pull water.
Q. Were you familiar with all the entries in the White Ash mine?
A. Yes, sir; I travelled over them all, that is, that were working.
Q. I will ask you whether or not during the month of February, 1895, you as boss driver superintended the hauling of water out of that entry?
A. Yes, sir; I was supposed to see that it was got out.
Q. I will ask you whether or not during the month of February, you actually did haul water out of that mine, and if so, how approximately?
288 A. Well, sir, I hauled water out of that mine every night that I was on as boss driver.
Q. Were you boss driver during the month of January?
A. No, sir, not all the month of January.
Q. As compared with the water hauled out by you during your employment in the month of January, did you haul more or less during the month of February?
A. Well, I wasn't boss driver all the month of January.
Q. Taking an even number of days in January and February, did you haul more water out in those days in February than you did in January?
A. Well, I could not say whether I hauled any more out in January than I did in February, nor I could not say whether I hauled any more out in the month of February than I did in January.

Q. About how many cars of water did you haul out every night during the month of February when you were in the position you occupied there?

A. How many cars the whole shift do you mean?

Q. Yes.

A. Well, that I could not say, sir.

Q. Well, about how many, of course not exactly how many, but about how many?

A. I think as near as to my best recollection, I have hauled from three to seven trips in the shift.

Q. Well, how many cars would there be to a shift?

289 A. Well, about the best I know of, say 8.

Q. Eight to the trip?

A. Yes, sir.

Q. And was that about the same amount that you hauled out during the time you served in the same capacity during the month of January?

A. Well, that is what I said I hauled, from three to seven trips, I said, as near as I could remember.

Q. Then if you hauled three trips, eight cars to the trip, how many cars would that be?

A. That would be 24 cars, three trips.

Q. And if there was seven trips?

A. That would be 56.

Q. On the night prior to the explosion, Mr. Hunt, can you state what the condition of the air and ventilation was in the White Ash mine?

A. Well, sir, I never found any difference in it from the first day I went into it, any more that night than it was the first day I went into it.

Q. Was that condition good or bad?

A. Yes, it was good.

Q. I will ask you, Mr. Hunt, if you know what a fire boss's danger signal is?

A. Yes, sir.

Q. I will ask you what the significance of a fire boss's danger signal placed upon a railroad tie across a railroad track in a room of that mine would be to any miner in the mine?

A. What is the meaning of that word significance?

290 Q. What idea does that convey to the men, what does the miner understand when he sees that signal?

A. Well, if he sees the fire boss's mark on a tie or anything else and his initials, the day of the month, one cross signifies gas, a little; if it is a big cross, a little more; if it is two crosses, nobody is too cross that; that is what they call among the miners the "danger line."

Q. Was that fact known to every miner in the White Ash mine and to miners generally?

A. Well, my experience in a coal mine is, I should judge a miner would know it. Of course I ain't speaking for every man. I am speaking for myself alone.

Q. And you are a man of how many years' experience in coal mining?
A. 22 years.
Q. What is your position now, Mr. Hunt?
A. I am fire boss in the Cook & White mine, Madrid.

Cross-examination.

By Mr. FIELD:

Q. You had not been a fire boss up to the time of this explosion, had you, Mr. Hunt?
A. O, no, sir.
Q. You graduated into a fire boss since that time?
A. I have held the position after that.
Q. You are now employed by the defendant company?
291 A. I am employed by what is known as the Cerrillos Rail and Coal Company, I think it is.
Q. Now let us confine ourselves to the time before the explosion in the White Ash mine. Is it not a fact that you never hauled any water out of the White Ash mine on your shift when there was any coal to haul?
A. I hauled water out every shift that I was in that mine as boss driver.
Q. That does not quite answer the question. Is it not a fact that you never hauled water when there was any coal to haul?
A. That's right. Now you're talking. No, sir, I could not haul water and coal both together.
Q. And your instructions were to give the preference to the coal?
A. Yes, I would hoist coal as long as it was there.
Q. And then if you had any time to haul water you hauled that?
A. Yes, sir.
Q. You say you had been through all the entries of the White Ash mine prior to the explosion; that is before the explosion?
A. Yes, sir.
Q. When had you been through the 4th left back entry before the explosion?
A. In the month of January.
Q. You had not been through there in the month of February?
A. No, sir.
Q. When in the month of January?
292 A. I was through all the entries in the White Ash mine one night in January.
Q. But after that you were never in the 4th left back entry before the explosion?
A. No, sir.
Q. Now, do you know, Mr. Hunt, where the water came from that you hauled out of that mine in the month of February?
A. Well, I know where it came from; where it was got into the car.
Q. Where?
A. There was some water in the 5th right back entry. There

was a syphon pipe in there. They syphoned it down into what they called No. 1 syphon or sump, and there was a syphon in the 4th left, syphoned in down from that syphon into the 7th left, and there was some water then in what was known as the 7th right.

Q. There was also some water at the face of the slope?

A. Sometimes.

Q. Whenever there was water at the face of the slope, you had to move that, didn't you?

A. Yes, when there was too much there for the diggers to work.

Q. And if you did not remove it the diggers could not work?

A. Not if there was too much.

Q. How much was too much, Mr. Hunt?

A. Well, a car-load would be too much for a man to work in, in a deep place.

293 Q. The water from the 4th left when the syphon was running went to the face of the slope, didn't it?

A. No, sir.

Q. Where did it go?

A. Went into a sump in the 7th left.

Q. You are sure that it did not go across the railroad track into the 7th right?

A. Well, there was some that went across there to the 7th right, yes.

Q. And there was some that came down the same direction into the 7th left?

A. Yes, sir.

Q. What turned it into the 7th left in place of going to the face of the slope?

A. It had a straight shoot; didn't take any turning at all.

Q. Is not the slope straight down?

A. Yes, straight down.

Q. You mean to say that water would cross the railroad track in the slope and then run into the 7th left?

A. The water came down the back slope, right straight down the back slope into a sump pretty near parallel or opposite the back slope; it was a little ditched in.

Q. That water didn't ever go into the main slope, at all, did it?

A. It would never go in if the sumps were kept down.

Q. Well, if it wasn't kept down, then what?

A. It would run over then into the slope, I judge, or perhaps into some other place in the back slope.

294 Q. Now, is it not a fact, Mr. Hunt, within your knowledge of the method of operating that mine, that when that syp-on pipe within the 4th left was running, the water had to be brought to the surface or it would go to the face of the slope and stop the works there?

A. Yes, if it was never hauled out, it would go to the face of the main slope.

Q. Is it not also a fact that the water was left in the 4th left?

A. I don't know anything about it.

Q. And not allowed to run down there because there wasn't time to haul all of the coal and all of the water?

A. Not that I know of, sir.

Q. There wasn't time to haul all the coal and all the water, was there?

A. Well, I don't know how much water there was left.

Q. You frequently had to leave water in the mine that you ought to have brought out because you didn't have the time?

A. I never drained the sumps dry.

Q. You frequently had to leave water in the mine that ought to have been brought out, because you didn't have the time to get it out didn't you?

A. Well, I should judge there was some left in these sumps, yes, sir.

Q. And the only reason that it was left was that you didn't have time to get it out?

A. I guess so.

Q. You say that you know all about a fire-mark?

295 A. Well, I think I do.

Q. And you did at the time of this explosion?

A. Yes, sir.

Q. Well, now, when you went to work on the night before this explosion, Mr. Hunt, did you know, or did you have any reason to believe that 48 hours before, or before that, before the time of the explosion, the fire boss had discovered a dangerous body of gas in room 8 and had marked it with a danger mark, but had not been back there since? Did you know anything about that?

Mr. TWITCHELL: I object to the word "dangerous" with reference to the gas, because this witness has not been asked about any such question; it is a hypothetical question not based upon any facts brought out in the direct examination of the witness and because it is improper cross-examination.

Objection overruled. Defendant excepts.

A. Within 48 hours did I know that the fire boss——

Q. At the time that you went to work did you know anything about it—that the fire boss had discovered a big body of gas?

A. No, sir, I never heard him say that he had discovered a big body of gas at all.

Q. Did you know or have any reason to believe that if the fire boss did discover a dangerous body of gas in an open place in that mine that he would leave it marked only with a danger mark for as much as 48 hours?

Mr. TWITCHELL: Objected to as improper cross-examination
296 and a hypothetical question based upon statements not in evidence in the examination-in-chief.

Objection overruled. Defendant excepts.

A. Well, no, sir, I don't believe he would.

Q. Mr. Hunt, at the time you went to work in that mine on that occasion, the night before this explosion, did you know or have any

reason to believe that the 4th left air course of that mine was seriously obstructed by water?

Mr. TWITCHELL: Objected to as a hypothetical question based upon facts not in evidence; nothing testified by this witness with reference to obstruction in the 4th left air course.

Objection overruled. Defendant excepts.

A. No, sir, I had no reason at all to believe that was obstructed by water.

Q. Upon whom, Mr. Hunt, did you rely for your personal safety in that mine?

A. Mr. Field, as far as I am experienced in a coal mine, I rely upon my own self. If I find any obstruction in the air and I think it ain't quantity to support me, I will make a kick to the foreman, and if he don't attend to it, and it don't suit I will go somewhere else.

Q. Do you rely upon the foreman performing his duty, Mr. Hunt?

A. Yes, to a certain extent.

Q. Would you as a competent miner work in a mine for an hour if you had reason to suppose that the foreman was neglecting proper precautions for your safety?

297 Mr. TWITCHELL: Objected to as a hypothetical question not based upon any evidence brought out.

Objection overruled. Defendant excepts.

A. No, sir, I would not.

Q. Would you as a prudent miner, work for one hour in a mine if you had reason to suppose that the fire boss was neglecting proper precautions for your safety?

Same objection. Objection overruled. Defendant excepts.

A. No, sir, I don't believe I would.

Q. Your understanding of the fire-mark was that two crosses meant a dangerous body of gas, is it not?

A. No, sir, I didn't make that remark.

Q. Well, what was your understanding, that it did or did not indicate a dangerous body of gas?

A. I distinctly stated that one cross, a little cross, signified a little gas, and a big cross, one single cross, a little bigger, and two crosses what is known amongst miners as the danger line, for no one to go across, but still, furthermore, it might not be a dangerous body of gas.

Q. Your idea being, Mr. Hunt, that it might be dangerous to go across the fire-mark, and still the gas would not be dangerous?

A. My idea is, as an experienced miner, I have put two crosses on this dead line or danger line, but still there wasn't over a lamp full of gas in the place, simply because I wanted it out of there, and I would not let anybody go across it.

298 Q. Then your understanding was that whenever there was two crosses put there the best thing to do was to get the gas out?

A. Yes, I would do it.

Redirect examination.

By Mr. TWITCHELL:

Q. There never was a time during the month of February, was there, when you were hauling coal out of the mine that you did not have time to haul water?

A. No, sir.

Q. But if there had been such an occasion you would have worked overtime, would you not?

A. Yes, sir.

Q. Now, you spoke about having gone to all the entries of that mine on one occasion. How did you happen to go through all these entries, Mr. Hunt?

A. Simply because I was put on as night boss that night.

Q. And you went through all the entries on that account, did you?

A. Yes, sir.

Q. How long was that before the explosion?

A. Well, I could not say exactly; I believe it was the second week in January, as near as I can recollect.

Q. During the month of February, did you haul water out of the 7th left?

A. Yes, sir.

Q. Continuously during that month?

299 A. Every night when I was on boss driver I hauled it out.

Q. And from the sump in the 7th left, the water came down out of the syphon in the 4th left?

A. Yes, that is where it would come to.

Recross-examination.

By Mr. FIELD:

Q. Did you ever see the water come from the 4th left to the 7th left sump?

A. Yes, sir.

Q. When?

A. I don't know, could not exactly say.

Q. Had you seen it run within a month before the explosion?

A. I could not say.

Q. Could not say that you had, could you?

A. Yes, sir.

Q. That you had seen it run within a month?

A. Oh, no, that I had seen it running.

Q. You had seen it running but you don't know whether it was a month before the explosion or a longer time?

A. Yes, sir.

Q. Did you work overtime hauling water during the month of February, 1895?

A. Well, I could not say, but I have stopped overtime lots of times since I was on there, hauling water.

Q. You don't know whether or not you did during the month of February?

A. Well I would not be positive whether I did or not.

300 Q. As you understood the operation of that mine, during the month of February, the idea was to get out all the coal you could?

A. Yes, I got out all the coal there was.

Rebuttal.

By Mr. TWITCHELL:

Q. And you got out all the water there was on your shift, didn't you?

A. I left some in some of the sumps.

Q. And for all you know, Mr. Hunt, that syphon running down from the 4th left to the sump in the 7th left might have been running a week or ten days before the explosion?

A. It might be for all I know.

Surrebuttal.

By Mr. FIELD:

Q. But you didn't see it.

A. I seen it running, but, as I told you before, I could not tell you when it was.

Q. But when it did run on your shift you saw it?

A. I seen it running but I don't know when it was running.

Q. If that syphon pipe ever did run on your shift, you saw it, didn't you?

A. I must have been in the mine and I must have been working, yes, decidedly.

By Mr. TWITCHELL:

Q. And you hauled water out of the sump in the 7th left every night during the month of February so far as you remember, is not that so?

A. Yes, sir.

301 Q. And for all you know that syphon may have been running at various times during the month of February, is that not so?

A. Yes, sir.

Q. And the water running into the sump in the 7th left would come from the 4th left back entry?

A. Yes, as far as I know, that is where the syphon is they told me it came from.

By Mr. FIELD:

Q. All of the water in the 7th left came from the 4th left?

A. All the water in the 4th left? Didn't I distinctly say as far as I know it came from the 4th left.

Q. All the water in the 7th left came from the 4th left?

A. As far as I know I guess it came from the 4th left; it decidedly came into the 7th left.

Q. Didn't the 7th left make water?

A. No, sir, I don't believe the 7th did make water. She was only a little ways from the slope I think.

Q. Did any water come to the 7th left except from the 4th left?

A. Well, I don't know; there might some have come from the 6th or from the roof or some other place.

By Mr. TWITCHELL:

Q. Is it not a fact, Mr. Hunt, that the 5th and 6th left were run through rock faults and were dry as a bone, and the 7th left as well?

302 A. Yes, that is right; that is what the 5th and 6th left was driving in, in a fault at the same time; I believe I am pretty near sure of it.

Witness excused.

This case adjourned until Monday, 12, 27, '97, at 9 a. m.

Court met pursuant to adjournment.

Mr. TWITCHELL: By agreement the testimony of John W. Fleming given on the former trial of this case may be read to the jury as part of this case.

The testimony was thereupon read to the jury and is as follows:

JOHN W. FLEMING, called as a witness for the defendants, being first sworn and examined by Mr. Twitchell, testified:

Q. State your name, age, and occupation.

A. John W. Fleming, 42 years old. I am now United States coal-mine inspector for the Territory of New Mexico.

Q. How long have you held that position?

A. Since May, 1894.

Q. Do you know the White Ash coal mine, in Santa Fé county?

A. I do.

Q. In the course of your official duty as coal-mine inspector did you ever inspect that mine?

A. I did.

Q. How often did you inspect it?

A. About every thirty days.

Q. Do you know when the explosion occurred in the White Ash coal mine in February, 1895?

A. I do.

303 Q. How long prior to the day of the explosion was it that you inspected the mine?

A. I think the explosion was on the 27th of February, and I think I was at the mine on the 24th of January.

Q. In inspecting the mine, state whether or not you inspected

the means by which the mine was ventilated and how you inspected it?

A. Well as a general thing, when I go into a mine, I take the intake just above the overcast and then go to just above the split, down the slope, where the air separates from right to the left and then I take it below the split down close to the last return on the left, and then I go into the entries and take it along up in the last cross-cuts generally through the mine, until I get to the top workings. Other times I start at the top and go down through the workings the same way.

Q. The last time you inspected the mine, did you take these measurements?

A. I did, in most of the places; I would not say that I took it in every place.

Q. How do you take air measurements?

A. With an anemometer.

Q. Who went with you at the time you made these measurements?

A. Donohue was with me on that trip.

Q. Do you know the superintendent of the mine?

A. Yes, James Duggan.

Q. Did he ever accompany you in inspecting the mine, with reference to taking the air measurement?

304 A. Several times.

Q. How many mines in the Territory of New Mexico, coal mines, in the course of your business, do you inspect and what are they?

A. Well, I think there is twenty-three or four, altogether.

Q. Name them the best you can.

A. Well, we will commence with Gallup, there is the Crown Point, Gallup mine, Caledonia, Beacon Hill, the Bailey, Rocky Cliff mine, then at Cerrillos there is the White Ash, Lucas, and the Miller Gulch, at Blossburg, that is in Raton, in that district, there is the Blossburg mine, Smith mine number two, the Lone Cedar, the Mesaner, then at Monero, in Rio Arriba county, there is the Monero and one adjoining it, I do not know the name of it, owned by Mr. Craig, he claims it, the Somners mine, and one other mine there. I think that is all there are on this side.

Q. So far as the circulation of air is concerned, in the White Ash mine, on the day you last inspected it, and the means by which the mine was ventilated, state what was the condition of the mine?

A. I considered it in very good condition.

Q. Have you got notes of the air measurement taken by you the last time you inspected the White Ash, with you?

A. I have got the air measurements for the time before the explosion.

Q. Where are they?

A. Down to the hotel, I think.

305 A recess was thereupon taken till this afternoon, at two o'clock.

On the afternoon of April 27, 1896, met pursuant to recess.

Examination of JNO. W. FLEMING continued by Mr. TWITCHELL:

Q. Can you give the results of the last measurement for air, made by you in the White Ash mine, by memoranda taken by you?

A. No, sir.

Q. I mean before the explosion?

A. Yes, sir.

Q. Please give them.

A. At this time I took the first measurement above the seventh right and left entries; that is what is called above the split. At that place I got 16,470 cubic feet of air per minute. On the seventh right, then, I got 4,462½ cubic feet. In the seventh left return, I got 9,100 cubic feet. Then I did not take it in the fifth. I believe there was only two men working in the fifth left entry at that time, working in the fault. I then went to the fourth left, the last cross-cut, fourth left, front or back entry—the fourth left is the air course at that point. I got 4,814 cubic feet. Then in number three, left entry, that is where the number six room connected them with back air course of number three. I took a measurement there. I got 9,120 cubic feet per minute. I then went into the last cross-cut, number three left, and there I got 4,895 cubic feet per minute. Then at that time I believe number one, number two was not working. I went then to just above the overcast in the slope and
306 took the intake, that is the air going into the mine, and got 42,120 per minute. Then I went into the return air course, and that is where it returns from the right and from the left, after going through the mine, and I got 42,900 cubic feet per minute. That is the air measurements for that time.

Q. At the time you made the measurement at the face of the fourth left how many men were working at the last cross-cut on the fourth left? How many men were working on the fourth left?

A. I have got it marked here, rooms working from five to seventeen, that would be twelve rooms working, and there are generally two men in a room.

Mr. FIELD:

Q. Would not that be thirteen rooms?

A. Includes five and seventeen, yes. That would be 26 men and there was two men working in front entry, would be 28 men.

Q. As compared with the other mines in the Territory of New Mexico which it is your duty to inspect, Mr. Fleming, with reference to ventilation, what have you to say of the White Ash mine, prior to the explosion?

Objection as irrelevant and immaterial, incompetent, and because if every other mine in the Territory was badly ventilated, it would be no excuse for the bad ventilation of the White Ash. Sustained. Exception by defendant.

307 Cross-examination of the witness FLEMING:

By Mr. FIELD:

Q. There were a driver and two men working in that entry, were there not?
A. Yes.
Q. And there was another man or two working in that entry too at times, wasn't there?
A. Yes, they worked if there is anything to do, but I do not recollect seeing any in there.
Q. You don't remember whether there was any or not?
A. No.
Q. How many animals were there at that time, if you know?
A. I do not know.
Q. At the time you took that measurement, then, at the last cross-cut and fourth left, it indicated less than five thousand cubic feet of air per minute circulating in that entry, didn't it?
A. Yes, 4,814 feet.
Q. What kind of an anemometer did you use?
A. Byron's.
Q. Is that the instrument prescribed by the Government for making air measurements?
A. Well, it is not——

Objection that that is not material and is not proper cross-examination. Question withdrawn.

Q. Is that the instrument prescribed by the Government?
A. There is none prescribed by the Government. I got
308 this anemometer from Mr. Spears, after he went out of office, the same one he used all the time.
Q. He was your predecessor in the office of mine inspector?
A. Yes.
Q. Mr. Duggan was not with you on the occasion of this last measurement before the explosion, the one we are talking about now?
A. No, sir.
Q. And that was on the 24th of January, 1895?
A. Yes.

Redirect examination.

By Mr. TWITCHELL:

Q. Who was with you at the time?
A. Mr. Donahue.

Witness excused.

ROBERT MCKINLEY, called and sworn as a witness for the defendant, testified as follows:

By Mr. TWITCHELL:

Q. State your name, age and occupation.

A. Robert McKinley; age, 52 years last March; occupation, miner.

Q. What was your occupation on the 27th day of February, 1895, Mr. McKinley?

A. Well, I was still a miner.

Q. Where were you working at that time?

A. In the 2d left entry.

Q. Of what mine?

A. White Ash mine.

Q. How long prior to the 27th day of February, 1895, had
309 you been a miner, Mr. McKinley? How long have you been engaged in that business?

A. About 40 years.

Q. How long had you worked in the White Ash mine prior to that explosion on the 27th day of February, 1895?

A. About two months, I think, at that time.

Q. Will you please point out on the map where the 2d left entry of the White Ash mine is, and what room or place you were working in, if you can, on that map?

A. I don't know that I am able to do it; I never looked at any map of that kind, but I suppose I can find it.

Q. You will find the 2d left marked on the right-hand side of the map.

A. I was working up here in No. 5 room, a room that had no track in it; it was abandoned and finished.

Q. What were you doing there; what was the class of work that you were performing, Mr. McKinley?

A. I was running a diamond drill.

Q. What, if anything, unusual, occurred on the 27th day of February, 1895, in the White Ash mine?

A. Well, some time after 11 o'clock, I think it would be, I felt something unusual; something that sounded like an explosion went through my head like the closing of the drums of my ears, and canvas shook around me.

Q. In what part of that room were you working at that time with reference to the face of the room?

310 A. Right at the face.

Q. How was the air conducted up to the place where you were working, if you know?

A. I don't know anything about the workings behind me, but the air came through a cross-cut from No. 6 to me, and the air led up to my place with a canvas.

Q. What was the condition or sufficiency of that air at that particular place, that is, the face of room 5 on the second left?

A. Well, right at that point there was sufficient for myself and

two men that worked with me going up to the face behind the canvas.

Q. Have you had experience in working in gas-y coal mines other than the White Ash, Mr. McKinley?

A. Yes; a little.

Q. Do you know what the fire boss' danger signal was, as used in the White Ash mine prior to *to* the day of the explosion, Feb. 27, 1895?

A. Yes; crosses were used as signals.

Q. What information would a fire boss's signal convey to you, Mr. McKinley, if you should come across one in the White Ash mine at that time?

A. Well, I would know if that mark was there opposite my place that there was some gas in there.

Q. What would be your action with reference to anything before an inspection would be had or before some employee of the company would direct you with reference to that mark?

311 A. I would stay there until the fire boss came and cleared that place for me and told me it was all right.

Q. How long prior to the explosion had you been working in the White Ash mine with reference to the month of February, had you been working in the mine during the entire month of February? You had worked there during January and February, 1895?

A. I said that I thought I had worked there about two months; I am not certain to a day the day I went there.

Cross-examination.

By Mr. FIELD:

Q. When you went to work in the White Ash mine on the 27th of February, 1895, had you any knowledge or any reason to suppose that there was a dangerous body of gas in room 8 of the 4th left entry of that mine and that it had been there as much as 36 or 48 hours, and that no effort had been made to remove it during that time?

Mr. TWITCHELL: Objected to on the ground that it is improper cross-examination and a hypothetical question based upon facts not brought out in the direct examination of the witness. Objection overruled. Defendant excepts.

A. No, sir, I have no knowledge of it.

Q. Had you reason to suppose that that condition of things existed?

312 Mr. TWITCHELL: Objected to on the same ground and as calling for the opinion of this witness.

Objection overruled. Defendant excepts.

A. I don't know why I should. I have no access to the reports of the fire boss or anything of that kind.

Q. When you went to work in that mine on the morning of the 27th day of February, 1895, had you any knowledge or any reason

to suppose that the 4th left air course of that mine was seriously obstructed by water and had been so for many days before that day?

Mr. TWITCHELL: Objected to on the ground that it is improper cross-examination, nothing of the kind brought out in the direct examination, and as being a hypothetical question based upon facts not in evidence, nor upon matters upon which this witness was examined in his direct examination.

Objection overruled. Defendant excepts.

A. No, sir; that was away below where I was employed.

Q. You said, I believe, upon your direct examination, that you had no knowledge of where the air which you got came from except that it came through a cross-cut from room 6 to you?

A. I didn't mean to say I had no knowledge of where the air came from. I said I didn't trace back to give a description of where it came from, that is what I mean.

Q. I only want to get at your knowledge, Mr. McKinley.

313 Do you know whether or not the air which was coming to you on the morning of this explosion had been to the working places of the 4th left before it got — you?

A. I don't know of my own knowledge. It is supposed to go there before it comes to me.

Q. Do you know or not that some time from 10 days to two weeks before this explosion an opening was made in the upper air course of the 4th left plane whereby air from the return air course was taken to the men upon the 4th left plane and thence through the 3d and 2d left working places without going to any of the other working places in the 4th left except the plane?

Mr. TWITCHELL: Objected to as being improper cross-examination. Nothing said about this matter in the direct examination of Mr. McKinley.

Objection overruled. Defendant excepts.

A. I don't know anything about an opening at all. It is out of my line of business.

Q. As a miner working in the White Ash mine about whom or about what did you rely for your safety while you were so employed?

A. The mine boss and the fire boss.

Redirect examination.

By Mr. TWITCHELL:

Q. You also relied, did you not, Mr. McKinley, as far as your safety and security was concerned upon all the employees in the White Ash mine performing the duties with which they were charged, did you not?

A. Certainly.

314 Recross-examination.

By Mr. FIELD:

Q. And upon the fact that the company would rigidly enforce the rules made by it for your protection?
A. Yes, that is what I would suppose.

By Mr. TWITCHELL:

Q. And so far as you know they were enforced?
A. Well, I don't know anything different.

Witness excused.

FRANK SCHERRUBLE called and sworn as a witness for the defense testifies as follows:

By Mr. TWITCHELL:

Q. What is your name and business?
A. Frank Scherruble; I am at present a coal-miner.
Q. How long have you been a coal-miner?
A. For about 8 years.
Q. Where were you working or what were you doing during the month of February, 1895?
A. I was employed in the White Ash mine mining coal.
Q. What shift were you working on at that time?
A. At the time of the explosion I was working on the night shift.
Q. Were you in the White Ash mine on the night prior to the explosion?
A. Yes, sir.
Q. What part of the mine were you in?
A. I worked in the 6th right, series, in the 3d room off the plane.
315 Q. How long had you been working in the White Ash mine at that time?
A. I believe I worked there since '92, to the best of my recollection.
Q. As to your having a sufficient quantity of air on the night of the explosion, please state what was the condition of the air in the White Ash mine at the place where you were working.
A. Well, the condition in our place naturally is good because the air had a very short distance to travel from the return.
Q. How long had you been working in that place at that time?
A. I could not say the exact time but it must have been, oh, about four months. We had about completed that room and it took us about four months, I think from the start.

Witness excused.
Court adjourned till 2 o'clock p. m.

Court met pursuant to adjournment.

JAMES DUGGAN, called and sworn as a witness for the defense testifies as follows:

By Mr. TWITCHELL:

Q. State your name, age, and occupation.

A. James Duggan, age 43, superintendent of the Cerrillos Coal Railroad Company.

Q. What was your occupation on the 27th day of February, 1895?

A. Superintendent of the Cerrillos Coal Railroad Company.

316 Q. What particular business, if any, were you in charge of there with reference to the White Ash coal mine at Madrid?

A. I was superintendent of that mine.

Q. Where is that mine located, Mr. Duggan, what county?

A. Santa Fé county, New Mexico.

Q. On the 27th day of February, 1895, how long had you been superintendent of the White Ash coal mine?

A. About one year and nine months.

Q. I will ask you to state what your duties were as superintendent of the White Ash coal mine as you understood them.

A. My duties were to see that the mine was in safe condition and that all the employees of the mine attended to their work and their business.

Q. Did you perform that duty?

A. Yes, sir.

Q. Describe the White Ash coal mine as it existed at that time, Mr. Duggan, to the jury?

A. At that time the main slope of the White Ash mine was about 2,900 feet in depth, in a seam of coal averaging 5½ feet in thickness. The pitch of the seam was about 12 or 14 degrees. There was seven entries turned to the left of the slope and seven to the right.

Q. Are you familiar with the map there upon the blackboard?

A. Yes, sir.

Q. What does that map represent?

A. It represents the workings of the White Ash mine on the 27th day of February, 1895.

317 Q. Are you familiar with the way in which the White Ash mine was ventilated on that day?

A. Yes.

Q. I wish you would describe by the use of the map, Mr. Duggan. Point out the manner and course of the ventilation there through that mine on the day of the explosion.

A. The intake air started in at the mouth of the slope and was carried to the foot of the slope to a point at the lower entries on the slope where it split. The air on the left side returned on the lower cross-cut on the left side of the slope to the back slope, from the back slope continued up to the back entry of the sixth left, from this sixth left back entry into the face of it up through the last cross-cut into the sixth left to the main entry, returned to the main entry,

to the upper air course of the sixth left continued from there up the back slope to the back entry on the 5th left and through the last cross-cut of the back entry of the 5th left to the main entry. From the main entry it went up the plane of the 5th left and aired the rooms on the 5th left; from there to the back entry of the 4th left into the last cross-cut of the 4th left main entry, passed from that point through the face of all the rooms of the 4th left back to room 6. It was partially split at that point and continued from there over into the rooms on the plane of the 4th left, and returned from that point into room 1 to the back entry of the 3d left; from there to the last cross-cut in the 3d left entry, returned to the main and the faces of the room there and as far as room 8 and
318 through the faces there over into the plane of the 3d left, returned from there to the last cross-cut in the 2d left, returned from there to the main entry, through the faces of the rooms of the 2d left up to the 1st left back entry. From that point it reached the overcast over to what is known as the "Union" return, and from that point it reached the fan. On the right side——

Q. It is not necessary to describe the ventilation on the right side, of the mine, Mr. Duggan. I wish you would describe to the jury in as plain language as you can, without the use of technical terms, just how that fan operated in extracting from the mine all of the air, good, bad and indifferent, in all the various working places in the mine. Describe to the jury the effect of the fan upon the mine so far as the air was concerned.

A. Well, this fan, at the speed it was running at the time, was exhausting from the mine about 30,000 cubic feet a minute, and this current of air travelled around the mine in the course that I have stated there on the map, that is, one part of it, about ½ of it, and all impurities and everything in the mine in the air, powder, smoke, dust and everything of that kind, was carried around to the fan, and it was kept continually in that way, with fresh air going in as these impurities were carried out.

Q. Where was the air divided after it went in at the main intake?

A. At a point at the 7th, a little above the 7th left and 7th right entry.

319 Q. Do you remember how many men were working on the left side of the mine at the time of the explosion on the 27th day of February, 1895?

A. No, not just now, I don't.

Q. Do you know how many men were working on the 4th left at the time of the explosion?

A. Yes, I do within a man or two.

Q. How many men were working on the 4th left and on the plane and in the entry?

A. I think it was 27 or 28.

Q. At what velocity per minute did you say the fan was being worked on the day of the explosion?

A. It was making 75 revolutions a minute.

Q. What was the usual number of revolutions of that fan per minute?

A. That was the usual speed it was run at.

Q. Now, describe to the jury the manner in which the coal was taken out of the White Ash mine and the manner in which work was conducted in the mine under your superintendence at and before the time of the explosion?

A. All of the coal in the mine was shot from the solid, in the rooms and entries. It was loaded into pit cars by the miners, at the faces of their workings, and in the rooms that were driven from the faces of the entries to the main entries. It was taken from that point by the drivers to a point near the slope where the main haulage rope could reach it, and from that point it was taken to the surface by a steam-hoisting plant located at the top and there dumped into coal cars.

Q. During the time you were superintendent of the White
320 Ash mine and prior to this explosion, Mr. Duggan, please state whether or not you were familiar with the workings of what is known as a safety lamp and ever used the same in the White Ash mine?

A. I was and used it.

Q. Now, describe to the jury the various kinds of employees who were working in the White Ash mine on the day of the explosion.

A. At the time of the explosion there were what is known usually as company men and miners.

Q. Well, give the class of employees known as company men.

A. There would be foremen, rope-riders, rustlers, track-layers, timbermen, drivers, trappers, water-balers, miners and laborers, and fire bosses.

Q. State whether or not these men were engaged and employed by the Cerrillos Coal Railroad Company under your direction and superintendence at the time of the explosion.

A. Yes, sir.

Q. Did you know this plaintiff's intestate, Jules Deserant?

A. Yes, sir.

Q. Did you know plaintiff's intestate, Henri Deserant?

A. Yes, sir.

Q. And plaintiff's intestate, Henri Deserant, Jr.?

A. Yes, sir.

Q. What was their business and what were they doing in the White Ash mine on the day of the explosion?

321 A. Coal-mining.

Q. What system of check did you have upon coal-miners with reference to their employment, how were they carried on the pay-roll, by name and check or just by check?

Mr. FIELD: Objected to as not the best evidence. I fancy that the pay-roll would be the best evidence.

Objection overruled. Plaintiff excepts.

A. Carried by check number and name both.

Q. Who was the day foreman or pit boss of the White Ash mine on the day of the explosion?

A. John Donohue.

Q. Who was the day fire boss?

A. I think it was John Deighton.

Q. Who was the night fire boss?

A. William Ray or J. W. Ray, I think his name is.

Q. I will ask you to state, Mr. Duggan, to the jury what were the duties of the day pit boss or mine foreman?

A. His duties were to look after all the men in the mine, to see that they attended to their duties, and see about getting coal out of the mine and look after the safe condition of the mine in every respect.

Q. What was the rule in the White Ash mine during the time you were superintendent up to the time of the explosion with reference to the amount of powder which miners were permitted to take into the mine at one time?

322 A. Each miner was allowed to take one keg of 25 pounds at one time into the mine.

Q. Can you tell what were the regular hours of firing in the White Ash mine on the day shift?

A. Yes, sir.

Q. State them to the jury.

A. The hours for firing in the rooms were 12 o'clock in the forenoon and five o'clock in the afternoon, and in the entry or all narrow places such as entries it would be 9 o'clock in the forenoon and 12 and 3 and 5 in the afternoon.

Q. If this rule with reference to regular hours of firing were disobeyed by a miner what would be the result so far as that miner was concerned as to his being discharged or not?

A. He would be discharged.

Q. When did this rule with reference to taking 25 pounds of powder into the mine go into effect, per man?

A. It went into effect before my time there a short while.

Q. Was that rule in effect during the entire time that you were in charge up to the 27th day of February, 1895?

A. Yes, sir.

Q. State whether or not on the day of the explosion and on the days immediately prior thereto the coal was being mined in the 4th left main entry and in the rooms turned off of that entry, as it had been accustomed to be mined in the White Ash mine for 60 days prior to the day of the explosion?

A. Yes, it was, so far as I know.

323 Q. Was the White Ash coal mine what may be called a wet mine or a dry mine, Mr. Duggan?

A. Well, I would consider it a dry mine, although the right side was wet, but the left side was dry, and taking it all in all compared with other mines, I think it would be a dry mine.

Q. At the time of the explosion, Mr. Duggan, how many years had you been engaged in the business of mining? State to the jury as best you can your entire experience as a miner from the

time you first performed any work within a mine up to the time of your acceptance of the position of superintendent of the White Ash coal mine?

A. Well, I started in the mine when I was 13 years of age, and I worked in mines and mills and prospected for coal. These mines consisted of copper mines, silver mines, iron mines and salt mines, and I worked in a machine shop for three years, so that I was connected with mines for about 25 years up to the time of the explosion.

Q. I will ask you to state whether or not, Mr. Duggan, at the time of the explosion in the White Ash mine you were or were not entirely familiar with the workings of the White Ash coal mine and of the manner in which it was worked, and whether or not you performed the duties incumbent upon you in that position?

A. Yes, I was familiar with every working place in the White Ash mine, and I think I performed my duties right to the letter there.

Q. I wish you would state whether or not examinations or inspections, if any, were made of the conditions of the White Ash
324 coal mine in all its parts and workings, and if so, when, and by whom?

A. I made a thorough inspection of all the places in the White Ash mine myself, and the foreman about three weeks before the explosion. This included every abandoned place and working place that was in the White Ash mine that was accessible.

Q. And what was the condition found by you at that time?

A. The condition of the mine showed everything to be in good shape.

Q. Whose business was it, if anybody's, to make daily inspections of the working places in the mine before the men went to work?

A. The fire bosses'.

Q. To whom, if anybody, were reports of the condition of that mine made?

A. Do you mean by the fire bosses?

Q. No; I mean reports of the conditions. The foreman for instance was in charge of the underground workings, and from the foreman to you, and from the foreman to people working under him, fire bosses, and everybody else, state to the jury how reports of the conditions were made?

A. The fire bosses would report to the foreman and the foreman would report to me.

Q. Who had charge of and whose particular business was it to measure the work and the product of the miners in the White Ash coal mine?

A. It was my business.

Q. How often would you do that?

A. Once a month.

325 Q. Do you know of your own knowledge what, if any signs, or marks, were used by the fire bosses in indicating to the miners employed in this mine the localities in which they should not go and in which they could go to perform their labors?

A. Yes.

Q. What were these marks?

A. The marks would be an X, XX and XXX, and the words danger or fire written across the entrance to the place.

Q. Now, describe to the jury, what these several marks meant to the miner or to anybody else working in the White Ash coal mine on the day of the explosion from the superintendent down?

A. When these marks were posted across the entrance of any working place or any place, it was a sign for any one not to cross over that except it would be the fire boss himself with a safety lamp or the foreman. The foreman had the authority to go over this place with safety lamps and investigate them.

Q. What were the dimensions of the main slope and the entries in that mine, Mr. Duggan?

A. Nine feet in width and the height of the coal.

Q. What were the dimensions of these parallel slopes?

A. Nine feet wide and the height of the coal.

Q. What were the dimensions of the main and back entry?

A. Nine feet wide and the height of the coal.

Q. What were the dimensions of the cross-cuts between the main and back entries?

326 A. They were the height of the coal and always not less than 7 feet in width.

Q. What were the dimensions of cross-cuts between rooms?

A. The height of the coal and not less than 7 feet in width.

Q. Now, Mr. Duggan, please state to the jury how air was measured in the White Ash coal mine and who did that measuring?

A. It was measured by what is known as a Byram's anemometer, and was measured by myself every week or ten days.

Q. State whether or not you made any measurement of the air circulation and ventilation in the White Ash mine at any time during the month of February, 1895, and if so, when, and give the places where the measurements were taken, and everything in connection therewith, beginning with the last measurement taken before the explosion. Have you got the memorandum with you?

A. No, sir.

Mr. FIELD: There is no objection to the use of the memorandum as it appears in the record, page 459 of the printed transcript.

A. We took an air measurement on February 9, 1895. The measurements were as follows: On the main intake I got 31,150 cubic feet of air going into the mine. On the first return on the 7th left we got 4,418 cubic feet per minute. On the 7th right we got 4,720 cubic feet per minute. On the first left we got 12,276 cubic feet per minute; on the 1st right we got 20,720 cubic feet per
327 minute. On the slope at the 7th entry before the air split we got 11,376 feet. The next measurement was taken on February 23.

Q. How many days was that before the explosion?

A. Three days elapsed between that time and the explosion. This measurement was taken on Saturday evening, after all work was finished in the mine.

Q. Were there any men in the mine at the time that measurement was taken except yourself and whoever was with you?

A. No, not that I know of. The foreman himself took the measurement. It was after working hours and I understood everybody was out. The measurement of the main intake on that day was 28,700 feet of air. The air measurement on the 7th left was 5,202. On the 7th right was 4,000. On the 1st left there was 12,012 feet. On the 1st right there was 12,656 feet. On the slope at the 7th entry before the split we got 14,580 feet.

Q. Do you remember, Mr. Duggan, whether or not any measurement was taken of the air at or near the face of the 4th left main entry at that time?

A. No, not just at that time.

Q. When was the last time you made a measurement of air in the 4th left?

A. I could not tell now without referring to the reports that are on file.

328 Q. State whether or not the course of the air on the Saturday prior to the explosion was the same as the usual course of the air in passing through the White Ash mine.

A. It was the usual course, excepting that in the rooms in new work that would be started from time to time branches of the air current would be changed from time to time, to air the place, but the main air course was always the same.

Q. I wish you would describe, Mr. Duggan, the character of the stoppings in all the cross-cuts, both on the main slope and in the cross-cuts between the main and back entries, and in the cross-cuts between the rooms; describe fully.

A. Mostly all of the stoppings on the main slope were what is known as sand stoppings. These were made with two tiers of plank, nailed up to props, about 6 or 7 inches apart; and that space was filled with sand, and the planks were morticed into the coal on each side, about six inches, and it was filled from top to bottom on both sides, perfectly tight, almost making them air-tight. The cross-cuts between the main entry and the back entry in the first place was boarded up with inch board and then filled up with dirt, rock, slate and rubbish, such as that. Cross-cuts from room to room were always dirt stoppings.

Q. Now I will ask you to describe the character of the stoppings in the cross-cuts of the 3d left entry from the point where the entry—along the entire extent of the main and back entries of the 3d left.

A. Those were all board stoppings in the cross-cut, and then filled up with dirt known as rock, slate and everything of that kind.

329 Q. What was their capacity, Mr. Duggan, with reference to the turning of air and keeping the course of the air in its proper course and current in going through that mine?

A. Why, they were in such shape that wherever one of them were stopped up, the air would go beyond that point to an entry that was beyond it.

Q. Did these stoppings in the cross-cuts between the main and back entry of the 3d left perform the duty with which they were charged?

A. Yes, sir.

Q. What was the character of the stoppings in the cross-cut between the main and back entries of the 4th left entry?

A. Dirt stoppings with a board center.

Q. State whether or not these stoppings performed the duty with which they were charged.

A. Yes.

Q. I will ask you to state, Mr. Duggan, if there was a point at any place on this 4th left back entry, or the 4th left air course, by which air was supplied to the plane of the 4th left.

A. I know of no such place.

Q. I will ask you, Mr. Duggan, whether there was any such place in the 4th left back entry where the air was conducted up to the plane-room on the 4th left air course.

A. No, sir.

Q. Without first having been conducted up to the face of the 4th left entry?

A. No, sir.

330 Q. Now tell the jury just how these brattices and curtains were set in place in the White Ash mine.

A. All the brattice in the rooms was carried through the last cross-cut up to within 12 or 15 feet of the face of the room in order to bring the current of air close to the face, and it was conducted in the same manner in the main entries as in the back entries.

Q. How was this brattice set up and maintained in position?

A. In the first place there was props put up between the roof and the bottom. They were put about 7 or 8 feet apart. Then a board was nailed from one post to another on the top, and the canvass was nailed on to this board and on to the props also. The canvass was generally the width of the height of the coal.

Q. Can you state what the length of the 4th left main entry was at the time of the explosion, from the main slope to the face?

A. I could not tell now without referring to the map.

Q. Well, refer to the map.

A. 1,650 feet.

Q. What was the length of the 3d left entry?

A. 1,800 feet.

Q. How many rooms were being worked in the 4th left at the time of the explosion?

A. Five or six rooms, that is in on the entry from room 12 up to 18.

Q. State whether or not, Mr. Duggan, during the month of January, 1895, there was an inspection of this mine with refer-

331 ence to the air circulation therein, by any individual other than yourself.

A. Yes.

Q. By whom?

A. John W. Fleming, the territorial mine inspector for the Government.

Q. State whether or not you were with him at the time of this inspection.

A. I don't remember now whether I was or not; I don't think I was, though.

Q. Now, with reference to the water in the White Ash mine, Mr. Duggan, state whether or not it was the custom to haul water out of the White Ash mine, and if so, how was it done.

A. Water was taken out of the White Ash mine with water cars, in connection with the taking out of coal.

Q. Whose business was it to haul the water out of the mine?

A. The rope-rider had charge of taking it out.

Q. State whether or not, Mr. Duggan, any orders were ever given to any person to haul coal in preference to water.

Mr. FIELD: Objected to unless it is limited to orders given by him.

Q. —by yourself.

A. No, sir.

Q. Were any such orders ever given by anybody under your direction?

A. Not to my knowledge.

Q. To whom were reports made of the condition of the mine as to its safety?

332 A. To me.

Q. To whom were reports made of the condition of the mine from day to day with reference to the hauling out of coal, and to the amount of coal mined per day?

A. These reports were entered in the office by the weighman's tally.

Q. Do you have access to these reports?

A. Yes, sir.

Q. What do these reports show?

Objected to. The reports are the best evidence.

A. Show the daily production of the mine.

Q. Did you know John Donohue, the day foreman?

A. Yes, sir.

Q. What was his position at the time of the explosion?

A. He was day foreman of the White Ash mine.

Q. How long, at the time of the explosion, had he occupied that position?

A. Why, about two months, probably a little less.

Q. Who employed him?

A. I did.

Q. State whether or not at the time of your employment of Donohue, you gave him any instructions with reference to his duties as mine foreman?

A. I did.

Q. State whether or not at the time of his employment by
333 you as mine foreman he was competent for the position for which he was appointed?

Mr. FIELD: Objected to as calling for a mere opinion of the witness.

Objection sustained. Defendant excepts.

Q. Mr. Duggan, during the two months that Mr. Donohue was mine foreman, were you familiar with his manner of carrying out the instructions and performing the services which were incumbent upon him to perform?

A. Yes.

Q. I will ask you to state whether or not from your knowledge of the manner in which he performed his labors as mine foreman, he was a man competent for the position?

A. I considered him competent.

Q. How long had you known Mr. Donohue?

Objected to as cross-examination of his own witness.

Objection sustained. Defendant excepts.

Q. What other position, if you know, had Mr. Donohue occupied in the White Ash mine prior to his appointment as mine foreman?

A. He was a coal-miner and fire boss.

Q. State whether or not any complaint of any kind was ever made of you as superintendent, with reference to Donohue in the performance of his duties as a pit boss or mine foreman?

A. No, sir.

Q. How long prior to the explosion had the individuals
334 who were working in the 4th left at the time of the explosion, been working in that entry or the room turned off of that entry?

A. I don't remember the length of time any of them worked.

Q. Have you any record which will show how long the men worked in the rooms turned off of the 4th left and how long they had been working there?

A. Our records would simply show how long they had worked in the White Ash mine. It would not fix any certain place.

Q. Where were you, Mr. Duggan, at the time of the explosion in the White Ash mine?

A. I was at the coke ovens at Waldo station about three miles from the White Ash mine.

Q. How did you happen to be there?

A. It was part of my duty to look after the coke ovens.

Q. And you were performing part of your duty at that time?

A. Yes, sir.

Q. When did you first hear of the explosion?

A. About 11 o'clock, or 15 minutes after it occurred.

Q. Upon hearing of the explosion what did you do?

A. I went immediately to the mine.

Q. What steps, if any, did you take after you had reached the mine to ascertain where the explosion had occurred?

A. As soon as I reached the mine I made some inquiries on the surface about the explosion but I could not get any definite
335 information, and I went immediately into the mine and got down as far as the 4th left, about as far as room 12. The first man I came in contact with was Jim Merchant. At that time he was boss driver in the White Ash mine. I asked him where the explosion took place and he told me where he thought it took place. He said he thought that they had broke into the old Green mine from room 14 on the 3d left. He said a whole lot of water came rushing down and filled up the air course of that 4th left back entry.

Q. Was that the Jim Merchant, who testified here the other day?

A. Yes, sir, I remained in the mine until 12 o'clock that night, until we got all the bodies out, assisting all day in getting the bodies out.

Q. What do you mean by the old workings from which you said that Merchant had told you that the water had come down through the mine. Point them out on the map.

A. They are not on the map.

Q. Well, tell the jury what they were.

A. The old Green mine would be an entry or slope to the left of the White Ash mine which had been abandoned for some few years previous to the explosion, and there was no connection between there and the White Ash mine, but the workings on the 3d left entry were being driven in the direction of this mine.

Q. This old Green mine was never operated by this defendant company in any way, was it?

A. No, sir.

Q. What precautions were you taking, if any, to prevent breaking into the old Green mine?

336 Mr. FIELD: Objected to as irrelevant and immaterial. Objection sustained. Defendant excepts.

Q. You say that you stayed in the mine all that day. How far up the 4th left entry did you go after the explosion was over, Mr. Duggan, after you got into the mine?

A. I went in the 4th left entry as far as the last cross-cut.

Q. Tell just what you did in there.

A. I assisted in getting some of the bodies out from there and the rooms from that entry.

Q. Did you notice the condition of the rooms of the 4th left entry at the time you were in there subsequent to the explosion, at that particular time?

A. I did some.

Q. What, if any, evidences, of explosion did you find or notice in any of these rooms, on the day of the explosion and immediately after when you were there?

A. We found all timber and props all badly burned and scorched

and some of the canvas was burned and scorched, and found several powder kegs all rent asunder, and found coal dust that was blown up from the floor of the room on to the end of cars partially coked.

Q. Were you in room 16 or room 17 on the day of the explosion?

A. Yes, sir.

Q. What were the evidences of explosion in that immediate locality?

337 A. It was in room 16 or 17 that we found the coal dust coked, and the props were more burned in that vicinity than in any other part of the entry, around 16 and 17.

Q. What was the condition of the stoppings in the cross-cuts between the main and back entry of the 4th left?

A. They were all blown out into the air course of the 4th left from a point along in room 14 or 15, I don't remember just where we ran the air.

Q. Now, what was the condition of these stoppings in these cross-cuts in that entry prior to the explosion on the Saturday when you were in there, good or bad?

A. They were all good.

Q. And this Saturday, what Saturday was that with reference to the explosion?

A. It was four days before the explosion.

Q. On that Saturday state whether or not you were up at the face of the 4th left entry or in the last cross-cut.

A. No, sir, I was not.

Q. If you know, state what was the condition of the air current passing through the left side of the White Ash mine on the Saturday prior to the explosion when you were last there.

A. It was just as good as usual on the Saturday prior to the explosion as at any other time that I knew of.

Q. In what way could the air current be discovered, be inspected except by the use of the anemometer?

338 A. Well, if the air got any way deficient, that is any large percentage of it, it would be noticed by the miners in their working places from the effect of the current on the flame of their lamps, and the powder smoke remaining around in their places.

Q. If such a condition of affairs should exist, what would the miner do?

A. He would complain to the foreman of the condition of the air.

Q. State whether or not you have ever made any other examination of the rooms turned off of the 4th left entry and the 4th left entry in the White Ash mine.

A. Yes, sir.

Q. When was that?

A. It was about a week after the explosion with the coroner's jury.

Q. Who were they?

A. Mr. Rogers, of Cerrillos, Mr. Alexander, Mr. Green, Mr. Kin-

sell, Mr. Fleming, the territorial mine inspector, and Mr. Fletcher, the Santa Fé mine inspector, and there were two other jurors, but I don't remember their names now.

Q. State what you did at the time of your examination of the mine and who went with you, that is, who accompanied you personally in your inspection, what you saw and what you found.

A. On that day we took air measurement in the White Ash mine. We went all through the air courses, we went, in the first place, from the mouth of the slope to the foot of the slope and returned
339 on the left side along the course until we came up to the 4th left back entry. At that point there was water in the 4th left back entry and the jurors did not want to get their feet wet in traveling through there, so we came out to the main slope again and went into the face of the 4th left main entry, and returned from that point through all of the rooms on that entry and investigated the conditions of everything in all the rooms on that entry. I don't remember how much further up we went now; we went to the 3d probably.

Q. What was the condition of the brattices, props and timbers and miners' boxes and powder kegs and everything else usually found in a coal mine, in the rooms where coal is being mined?

A. The canvas was all torn down in places where it had not been put up again. Some of it had been twisted around props and in some places ropes were twisted around props and the props were all burned and scorched in places, and powder kegs were thrown around, rent asunder; that was about the condition of things.

Q. Were there any loaded cars of coal in the 4th left entry or in any of the rooms on the day of the investigation?

A. Yes. I don't remember now whether there were and cars on the track that day or not.

Q. Well, was there at the time you went into the mine first after the explosion?

A. Yes, sir.

Q. What was the condition of that car as to being on the track or off?

A. It was off the track.

340 Q. How much does one of these cars loaded with coal weigh?

A. Coal and car weigh about 5,000 pounds.

Q. How far is that from room 16?

A. It was either in 16 or 17 room when I went through, I don't remember which now.

Q. How far was it from room 8?

A. I could not tell the distance without referring to the map.

Q. Well, measure it on the map.

A. It would be about 500 feet from room 8 if it was in 16, and if it was in 17 it was about 550 or 560 feet.

Q. Where did you find the greatest indication of explosion; in what room?

A. The greatest indications were in 16, or right in that vicinity.

Q. State what these indications were?

A. The props in these rooms were more burned than in any other part of the entry. That is the only place where we found coal dust that was coked, and at this point there at 16 or 17 is where this loaded car was moved from the track; moved several feet.

Q. From the indications which you found in these various rooms, in what direction from room 16 did the force of this explosion extend, as far as you can form an opinion?

A. It seemed to extend over as far as room 8, on the 4th left entry, and a little beyond that and in the opposite direction to the face of the 4th left entry, and returned or rebounded to the 4th left back entry.

341 Q. What, if any, indications of explosion did you find or did you know of, at the parting or at the door on the 4th left main entry?

A. I don't remember any investigations that I made there just at the present time, except what I had heard.

Q. How many of these powder kegs rent asunder, burst open, did you find?

A. Seven or eight.

Q. What was the capacity of these powder kegs, that is, what was their size?

A. They were about 8 or 9 inches in diameter and about 12 or 13 inches high.

Q. How many pounds of powder would they hold?

A. 25 pounds.

Q. What are these kegs made of?

A. Sheet iron.

Q. Where do miners keep their powder kegs when they are not using them?

A. In their tool boxes.

Q. Are these boxes kept closed or opened?

A. They are kept closed.

Q. State whether or not you found any indications in any of the rooms turned off of the 4th left entry of what is known as a "blown-out shot."

A. I didn't investigate anything on that line myself, so I don't remember at the present time anything about it.

Q. Who did make such investigation, if anybody, if you know?

Objected to as leading and suggestive. Objection sus-
342 tained. Defendant excepts.

Q. State whether or not you were in room 8 at the time you went into the mine subsequent to the explosion or any day subsequent to the explosion?

A. Yes.

Q. State whether or not you found any marks or indications in room 8 showing that a fire boss had been in that room prior to the explosion?

A. I saw fire boss's marks in the room.

Q. Where did you find these marks and what were they?

A. These marks were about six or seven feet below the last cross-

cut, is my remembrance of it. I think there is a double cross; they seemed to be slightly blurred or blotted out at the time.

Q. When was it that you saw that mark, on what day?

A. About a week after the explosion with the coroner's jury.

Q. State whether or not there were any ties or railroad track in room 8 when you made this inspection, when you were there with the coroner's jury?

A. Yes, sir.

Q. Where were they?

A. There was tracking and ties directly opposite the last cross-cut. That is all that I remember just at the present time. I know there was track there because we went in there through the last cross-cut from room 9 to 8, and I remember seeing track there, and that is all I remember now.

343 Q. Now, point out on the map, Mr. Duggan, the point above the last cross-cut where you found that fire boss's signal?

Mr. FIELD: Objected to because he didn't testify that it was above the last cross-cut; he said below.

Objection sustained. Defendant excepts.

Q. Where was it that you found this fire boss' mark in room 8 when you were there with the coroner's jury? It appears from the stenographer's notes that you said *below* the last cross-cut.

A. Well, that is my remembrance of it now; that is what I remember now.

Q. Well, are you positive that that is the place where you found——

Objected to as cross-examining his own witness.

Q. What, if you know, Mr. Duggan, was the working condition of this property on the day of the explosion and for a month prior to the day of the explosion?

A. It was good.

Q. Now, when you went into room 8 after this explosion was over, how far up into room 8 did you go?

A. I went right to the face of the room.

Q. Will you please tell me how far below the cross-cut which you entered from room 9 going into room 8, the curtain or brattice is tacked up or was tacked up at that time when you went in with the coroner's jury?

344 A. I don't remember just now. I know how much it should be.

Q. Well, how much should it be?

Objected to. Sustained. Defendant excepts.

Q. What time was it customary for the men working in the White Ash mine on the day shift to go to work?

A. Between 6.30 and 7 o'clock in the morning.

Q. What, if any, instructions, would the miners receive in going to work in the White Ash mine, from any individual charged with that duty before they were permitted to go to work?

Mr. FIELD: Objected to because there is no foundation laid to ask this witness any such question as that and because it calls for hearsay.

Objection sustained. Defendant excepts.

Q. Do you know whether men were allowed to go into the White Ash mine and work in any part of it until they were permitted to go by the fire boss?

A. Yes, I do.

Q. Were they allowed to go to work until they were permitted to go by the fire boss in the morning?

A. No, sir.

Q. State whether or not it was part of the fire boss's duty to advise the persons going into the mine as to the condition of the property and of the place where the individuals were going to work.

345 A. It was the fire boss's duty to advise each man of the condition of his place.

Court adjourned until 9 a. m. tomorrow.

Court met pursuant to adjournment.

Q. Mr. Duggan, do you know how much coal was mined in the White Ash mine during the months of December, January and February, 1897?

A. Yes, sir.

Q. How much was mined in December?

A. A little over 12,000 tons.

Q. About how much was mined in January?

A. Something over 12,000 tons.

Q. And how much in February?

A. A little over 12,000 tons.

Q. In which one of these three months was the most coal mined?

A. I think there was a little more in February, but a very little; probably a couple of hundred tons.

Q. How much was the average daily product of coal from the White Ash mine during these three months, if you know?

A. Six hundred or 700 tons a day.

Q. Can you state when it was that the work was mostly prosecuted on the left side of the mine during the month of February?

A. I don't know that there was any difference in the month of February; probably worked with the same rate in the first part of the month as it was in the last part as I can remember.

Q. Well, which side of the White Ash mine was being worked and which side was not being worked at the time of the explosion?

346 A. Everything on the left side of the mine from the 2d left down inclusive was being double-shifted, and everything on the right side of the mine was abandoned with the exception of a few men working in the 2d right. I think there was some men working in the 5th and the 6th right.

Q. Was the mine working a double shift during the month of December, 1894?

A. All the entries were double-shifted in December.

Q. And in January how was it?

A. They were being double-shifted then with the exception of entries that were abandoned on the right side.

Q. In the passage of the air through the mine, Mr. Duggan, at what point in its course to the various air courses and rooms and towards its place of exit at the fan would the air be charged with the greatest percentage of impurities?

A. Well, that would be owing to the amount of air at that point.

Q. Well, would the percentage of impurity be greater or less at the foot of the main slope than it would at the face of the 4th left entry?

A. The percentage of impurities would be greater at the face of the 4th left entry.

Q. Would the percentage of impurities be greater or less at the face of the 4th left entry than at the face of the 3d left entry?

A. The percentage would be greater at the face of the 3d left assuming that the same amount of air was going there as there was at the face of the 4th left, that is, in proportion.

347 Q. Then what have you to say as to the percentage of impurities in the air on its way to the fan than at any point in the 2d left and at the face of the 4th left entry? Would it be greater or less in the 2d left than it would at the 4th left face?

A. Why, the percentage of impurities would be greater at the 2d left.

Q. Can you state what the capacity of the sump in the 7th left was?

A. No, only approximately.

Q. Well, to the best of your ability, give us the capacity of that sump?

A. Well, I can simply state the size we generally made them.

Q. Well, can you testify with reference to the size of that one in the 7th left?

A. No, I could not.

Q. With reference to the operation of coal mines of the character of the White Ash, I will ask you now, whether or not you are able to state whether the stoppings in the various cross-cuts were or were not of the kind accustomed to be used and placed in mines of that character for the purpose of carrying air around to the face of the working places?

Mr. FIELD: Objected to because no proper foundation has been laid for the purpose of asking this question of this witness, it not being shown that he ever saw the inside of any other coal mine in his life except the White Ash mine.

Objection overruled. Plaintiff excepts.

A. Yes, they were.

348 Q. I will ask you, Mr. Duggan, what were your entire duties in your position as superintendent of that property, not only in connection with the White Ash mine, but of all the business there of the defendant company?

A. I had in charge all the three coal properties there and the coke ovens at Waldo station. It was my duty to look after the business of the entire work there.

Q. Did or did not, Mr. Duggan, a proper manner of conducting the White Ash coal mine neccessitate air stoppings in cross-cuts between rooms?

A. No, sir.

Q. Did or did not, Mr. Duggan, a proper method of conducting the White Ash coal mine and the circulation of air in that coal mine, require air-tight stoppings in the cross-cuts between the main and back entries?

A. Why, not absolutely air-tight.

Q. I will ask you whether or not during all the time you were superintendent of that property, prior to the explosion, you familiarized yourself with the underground workings, with the general conduct of the mine underground, the places where gases were apt to be generated in the mine and generally as to the proper operation of the property?

A. Yes, sir.

Q. Did you do that?

A. Yes, sir.

That is all.

349 Cross-examination:

Mr. FIELD: We wish to insist that the witness should now be exhausted as to all matters of defense in chief, now known to counsel, before we commence our cross-examination.

Mr. TWITCHELL: I will state that owing to the information stated in a telegram last night, one of our witnesses would not be here until the noon hour, and there are some matters with reference to working days in the mine and with reference to days of work performed by individuals, and with reference to the services performed by plaintiff's intestates, it is impossible for me to ask these questions from Mr. Duggan at this time.

Mr. FIELD: If it is entirely disconnected with the subject-matter of the present investigation we have no objection.

By Mr. FIELD:

Q. I understand that you give it as your opinion that at the moment of the explosion in the White Ash mine on the 27th day of February, 1895, the mine was in good working condition?

A. Yes, I do.

Q. You think then that that explosion is entirely consistent with the proposition that everything inside that mine was in first-class condition?

A. Things may be in first-class condition in a mine and an explosion take place.

Q. And it is today your opinion with all of the knowledge which you have acquired since that explosion, including the results
350 of your investigation made immediately after the explosion, that at the time of the explosion, at the moment of the explosion, the mine was in good working condition?

A. Yes, I do.

Q. And nothing that you have ever seen has had the slightest tendency to shake that conclusion of your mind as an expert?

A. I have seen nothing to indicate but what the mine was in a good condition.

Q. You are an expert superintendent of coal mines, aren't you?

A. I don't know where you got that information; I never said so.

Q. Well, are you or are you not an expert superintendent of coal mine-?

A. I don't know that I am compelled to answer that question, sir. I never assumed that I was an expert.

The COURT: Answer the question.

A. I say that I never assumed that I was an expert.

Q. How many years had it been at the time of your appointment as superintendent of the White Ash mine since you were underground in any kind of a mine, Mr. Duggan?

A. Why, about a year.

Q. Didn't you testify upon the last trial in this case that at the time of your appointment as superintendent of the White Ash mine you had not been underground in a mine for 7 or 8 years?

A. No, sir, I did not; I testified that I had not been into a coal mine in 7 or 8 years.

351 Q. Had you ever worked in a coal mine in your life, at the time of your appointment as superintendent of the White Ash mine?

A. I worked at coal mines, but not inside.

Q. What experience, had you had underground in a coal mine, practical experience, at the time of your appointment as superintendent of the White Ash?

A. I never mined coal before I was appointed superintendent.

Q. At the time of your appointment as superintendent of the White Ash mine had you ever taken a safety lamp and gone into a coal mine to inspect it for gas?

A. No, sir, I did not; and you can find miners that worked in coal mines for 30 years that had not done so either.

Q. Did you understand that I was inquiring about the experience of other people in coal mines, Mr. Duggan?

A. No, sir, I do not.

Q. Then, sir, kindly confine yourself to an answer to the questions that I propound to you. It is your experience that I am after now and not anybody else's. At the time of the explosion in the White Ash mine, on the 27th day of February, 1895, had you ever in your life inspected that mine or any other mine with a safety lamp for the purpose of detecting the existence of gas?

A. Yes, I did.
Q. How many times?
A. Several times.
Q. How many?
352 A. I say several; it may be one, two or three, it may be more.
Q. You can't tell whether it was one, two, three, or more times?
A. No, sir, I can't.
Q. What mine was it that you so inspected?
A. The White Ash mine.
Q. What part of the White Ash mine?
A. The entire mine that was accessable.
Q. Did you find any gas?
A. No, sir, not of any consequence, except little feeders in the corners.
Q. Who was with you when you made these inspections for gas?
A. The foremen of the mine.
Q. Who was the foreman?
A. John Donohue was one and Edward Flynn was another and John Ellsworth was another. I never made any inspections with him.
Q. When was Flynn foreman of the mine?
A. He was there probably from 5 to 8 or 9 months previous to the explosion, I think.
Q. How many inspections did you make in company with Flynn for gas?
A. I don't remember. I could not tell with the exception of going around with him.
Q. Did you ever in your life, Mr. Duggan, attempt to inspect any portion of the White Ash mine for gas unless you had along with you at the time some experienced man who knew about gas?
A. Why, I say the foreman was with me.
Q. Your experience in coal-mining prior to your appoint-
353 ment as superintendent of the White Ash mine was confined entirely to working a diamond drill prospecting for coal, was it not?
A. Yes, that is my experience in connection with coal mines; it was principally that.
Q. If you have had any other practical experience I want you to tell us about it?
A. Not with the exception of being in coal mines and doing drill-work around coal mines.
Q. How many coal mines had you ever been in in your life at the time of your appointment as superintendent of the White Ash?
A. I distinctly remember of being in three.
Q. Were they gas-y mines?
A. I think one of them was.
Q. Did you see any gas in any one of them?
A. I don't remember now whether I did or not.
Q. When was it with reference to your appointment as superin-

tendent of the White Ash mine, that you had been in these three other mines?

A. The first mine that I was in was in the fall of '82, in Danville, Illinois.

Q. What were you doing there?

A. I was putting down some drill-holes for a coal company at that point.

Q. How long were you in that mine?

A. Oh, just took a trip in there; I don't know.

Q. How far down in the mine did you go?

A. It was a drift mine; I carried in the level some distance.

Q. Now, where was the next one?

354 A. The next one was in Fort Bayne, Alabama.

Q. When was that?

A. That was about seven or eight years previous to the explosion.

Q. What were you doing there?

A. Prospecting for coal for the Fort Bayne Coal and Iron Company.

Q. Was that a gas-y mine?

A. No, sir.

Q. How far into that mine did you go?

A. Only went in about 200 feet; the mines were just being developed at the time.

Q. Then where was the next one?

A. The next one was the Mary Lee mine in Birmingham, Alabama.

Q. When was that?

A. That was about the same time, a few months later.

Q. How far into that mine did you go?

A. I think I went down the entire distance of that slope, I don't remember how deep it was; it was pretty deep; and went into the rooms and entries, etc. It was a pitching vein of the same pitch about with the White Ash, as I remember, probably a little more.

Q. How long did you stay in that mine?

A. I don't remember; I might have been in there a couple of hours, maybe.

Q. Was that a gas-y mine?

A. I think there is some gas being generated there.

Q. Did you see any?

355 A. No, I did not.

Q. Then, if I understand you, Mr. Duggan, at the time of your appointment as superintendent of the White Ash mine, you had been underground in coal mines in your life, all told, as much as 6 or 8 hours?

A. Maybe that, a little more or less, probably.

Q. What were your duties as superintendent of the White Ash mine?

A. My duties were to see that the entire work was properly conducted.

Q. Are you a man of such education and capacity that you could

make a map such as is on the blackboard here, of the underground workings of the mine?

A. No, sir.

Q. Did you ever see this book which I hold in my hand, Exhibit "B"?

A. Yes, sir.

Q. State what it is.

A. It is the contract book which the miners of the White Ash mine signed up to May, 1896.

Q. When did it begin, do you know?

A. I think it was in May, '93, a few days before my time.

Q. It is headed "Cerrillos Coal Railroad Company, Los Cerrillos, New Mexico, 5–6–'93, rules and regulations governing the White Ash mine," and the written part of it prior to the signature winds up "That the undersigned agree to and accept the foregoing rules and regulations for the term of three years from April 1st, 1893," is that what it is?

A. Yes, sir.

356 Q. It was a part of your business as superintendent of that mine to know that the mine was in good working condition, wasn't it?

A. Yes, it was.

Q. Did you know at the time of this explosion that the 4th left air course of that mine was obstructed with water and that that water had reached a point within three inches of the roof on the lower side of the air course and extended 200 or 300 feet along the air course?

A. I knew that there was some water in there for several weeks previous to the explosion, but no such quantity as you mention.

Q. How long had you known that there was water in that air course?

A. For at least 3 or 4 months.

Q. Did you know that there was a syphon pipe provided by that company for the purpose of syphoning out that water?

A. Yes, sir.

Q. Do you know when that syphon pipe ran last before the explosion?

A. No, sir, I do not.

Q. You don't think or didn't think it was a part of your duty to know whether that syphon pipe ran or not?

A. If I knew that the air course was all right and not obstructed enough to interfere with the air, it didn't make any difference whether I knew that the syphon pipe ran at any certain times or not.

357 Q. If you knew that there was water in that air course, did you think that you performed your duty as you understood it, if you made no effort to find out how much water there was there, as long as you were satisfied that the air course was all right as you express it?

A. If it was known that there was water there to interfere with the air it would have been reported to me.

Q. If there was water there which did interfere with the air wasn't it your duty to know it without any report to you?

A. It was not my duty to go right into the mine any particular place and investigate every little piece of detail work. I had men under me for that purpose.

Q. If there was water there which did interfere with the air wasn't it your duty to know it without any reports to you?

A. I don't think it was my duty to know.

Q. Was it anybody's duty to know if there was water in that air course which obstructed the free circulation of the air?

A. Yes, it was.

Q. Whose duty was it?

A. It was the foreman's duty.

Q. You mean John Donohue's?

A. Yes, sir.

Q. Now, if he knew it, what was it his duty to do in connection with it?

A. It would be his duty to have it taken out if he knew it interfered with the air.

Q. Well, then, it would not be his duty to report it to you?

A. Yes, sir.

358 Q. It would be his duty to report it to you?

A. Yes, it would.

Q. And then, what would be your duty?

A. It was my duty to instruct him to have it taken out.

Q. Was it not your duty personally to see that it was taken out, as you understood your duty?

A. If I instructed him to take it out I would find out immediately after the lapse of a certain time whether he had done it or not, and then I would investigate it if I found that there was not sufficient done to make the entry in a good safe condition.

Q. And, notwithstanding the fact that you knew that there was water in that air course for three or four months before the explosion, you never said anything to Donohue about it?

A. In what respect?

Q. In any respect.

A. There was water always in there. There was water in nearly all the air courses of the mine, more or less.

Q. Well, now, do try and answer this question, Mr. Duggan. Notwithstanding the fact that you knew that there was water in the 4th left air course for three or four months prior to the explosion, you never said a word to Donohue about that particular water in that particular air course?

A. I didn't say anything to him about that water any more than any other water, for the simple reason that I knew there was always a certain amount of water in there; there was a low place in there.

359 Q. And he never said anything to you about it?

A. No, sir, he did not.

Q. And you never inquired whether the syphon ran or not within those three or four months, did you?

A. I knew it had run inside of three or four months.

Q. Well, when did you know of its running last before the explosion?

A. I don't remember.

Q. You didn't see it running within a month before the explosion, did you?

A. I might have and I might not.

Q. Well, you don't know that you did, do you?

A. I don't remember, I might and I might not.

Q. Do you remember seeing it run after the 1st day of January, Mr. Duggan?

A. I don't remember now when I saw it run, with the exception that it was within probably three or four months, but I knew I had seen it running during that time.

Q. But you think that you did all that your duty required of you as you understood it, with reference to the water in the air course?

A. Yes, I know I did.

Q. Now if you had information that there was a body of water in the air course sufficient to obstruct the proper circulation of the air in that mine, what would you have done about it?

360 A. As I said before, I would have instructed the foreman to have it taken out.

Q. And you would have seen that he followed your instructions, would you not?

A. Yes, I would.

Q. You told Donohue at the time that you employed him that it was his business to keep the mine free from water and the air courses free from obstruction, did you not?

A. Yes, I did.

Q. Well, if he didn't keep the mine free from water and the air courses free from obstruction, he didn't do his duty, did he?

A. I don't know whether he did, but that is the condition that the mine should have been kept in.

Q. You testified on the former trial of this cause as follows, didn't you, Mr. Duggan: "Q. You told Donohue at the time you employed him, you testified on your direct examination, that it would be his business to keep that mine free from water and the air courses free from obstruction. If he failed to do that he failed to do his duty, did he not, Mr. Duggan?" To which you answered: "A. Why, he did, if he did so without reporting it to me." And then you were asked the question: "Q. Did he report to you that the 4th left air course of that mine was obstructed with water?" To which you answered: "A. No, sir." And the question was: "Q. Then in that regard he failed to do his duty?" To which you answered: "A. Well, if I understand the question right, if the air course was obstructed with water, and it was kept in that

361 condition, and he failed to report that to me, he did not do his duty." Did you so testify upon the former trial?

A. I think I did testify something to that effect.

Q. Well, that was entirely true as you understood it?

A. Well, if he knew that the air course was obstructed with water, I think he would have failed to have done his duty.

Q. Did you know that on Sunday night before the explosion gas was discovered in room No. 8 of the 4th left entry of that mine, extending across the face of the room and 10 or 11 feet down from the face?

A. No, sir, I did not.

Q. Was it or not a part of your duty, as you understood it, to know that fact, if it was a fact?

A. If it was a fact it would be my duty later on. It would be not my duty to know it right instantly when it was discovered.

Q. Well, if it is a fact, that one of the fire bosses in that mine on Sunday night before the explosion discovered a body of gas in room No. 8 of the 4th left entry, which body of gas extended across the face of the room and down into the room 10 or 11 feet from the face, tell this jury what was your duty and what was the fire bosses' duty and the foreman's duty with reference to that body of gas, as you understand these duties?

362 A. It would be the duty of the fire boss right at that time to move the body of gas and report the thing no further just at that time until he did that.

Q. And then it would be nobody else's duty to do anything about it?

A. I say at that time it was his duty to do that first, to move the body of gas when there was nobody in the mine but himself.

Q. And if he failed to move that body of gas at that time he failed of his duty, did he not, Mr. Duggan?

A. It would be owing to the circumstances and conditions there.

Q. Then I understand you that it was not his duty to move the gas; that circumstances or conditions might have excused him from the performance of that duty?

A. It might have delayed him.

Q. If it would delay him in the performance of his other duties——

A. I don't mean in that respect.

Q. Wait until I ask the question. If it would delay him in the performance of his other duties in that mine he might, you think, failed to remove that body of gas and yet not fail in his duty?

A. A fire boss may go there and might be unable to move this by himself, if he found a dangerous body and might not have always wanted to undertake it alone and would wait for assistance. That is why I say that if he could not do it instantly the matter would be delayed until he got some assistance.

363 Q. Such a body of gas as is contemplated in my question is in your opinion a dangerous body of gas, is it not, Mr. Duggan?

Q. I would have to know something about the entire dimensions of the gas to know whether it was dangerous or not.

Q. Suppose the gas as described by the fire boss is a body of gas extending across the face of room 8, and down 10 or 11 feet from

the face in the room. Can you from that description determine whether or not it was a dangerous body of gas?

A. Yes, I can.

Q. Well, state whether it was a dangerous body of gas.

A. I would consider it so.

Q. Now, then, as I understand you, if the fire boss discovered such a body of gas, it was his business to move it, if he could before he did anything else?

A. Yes, that was his duty.

Q. And if he could not do it without assistance to get assistance?

A. Yes, sir.

Q. And then remove it as soon as practicable?

A. Yes, sir.

Q. Now, if he neither removed it himself, nor got any assistance, nor made any effort therefor, before the explosion, to remove that gas, he was guilty of a flagrant violation of duty, wasn't he, Mr. Duggan?

A. Well, if the conditions were such as you state, and all the facts, he did not do as he should do, not if I knew it.

364 Q. If when he discovered that body of gas he marked a tie with a double cross and the words, "fire," "danger," and his initials and the day of the month and threw the tie down on the railroad track above the last cross-cut, and reported to the foreman that he found a little more gas than usual in room No. 8 that night, and did nothing more about the matter, and did not go back to the fire-mark again before the explosion; did he or did he not, in your judgment, discharge his duty with reference to that gas?

A. Well, as I say, unless some conditions or circumstances existed that I don't know anything about, he would not have done his duty.

Q. Now, if after the report by the fire boss to the foreman of the existence of this gas, no effort was made by the foreman to remove that gas between the time he received this knowledge of its existence, this report of its existence and the explosion, did the foreman do his duty?

Mr. TWITCHELL: Objected to as improper cross-examination and as being a hypothetical question not based upon any facts in evidence with reference to whether or not the foreman had taken any steps to take the gas out of room 8. Furthermore, the presumption obtains that the foreman did perform his duty.

Q. I will change the form of the question, saying, "the foreman did not remove the gas," instead of saying, "no effort was made."

Mr. TWITCHELL: Same objection.

Objection overruled. Defendant excepts.

365 A. If the fire boss reported a dangerous body of gas to the foreman, why he should have had it removed.

Q. And if he didn't have it removed, he did not do his duty?

A. I don't suppose he did do his duty.

Q. Now, Mr. Duggan, if, on the next inspection of the mine on

Monday morning before the explosion the other fire boss went into that room and discovered a body of gas in room 8 and marked it with the fire-mark, but did not see the fire-mark—Mr. Clancy calls my attention to the fact that I have located the time of that inspection a few hours out of the way. If that first inspection to which this previous question referred and the first discovery of that gas was made on Monday morning instead of on Sunday night, your answer would be the same, would it not?

A. Yes, sir.

Q. If on Monday night before the explosion it would be when the inspection was made of the mine for the men to go in on the night shift, the Monday night shift, now, if at that inspection the night fire boss went into that room 8 and discovered a body of gas, but did not discover the fire-mark of the day fire boss and he put two fire-marks, one above the last cross-cut up towards the face of the room and the other below the last cross-cut, down towards the neck of the room, and he reported to the foreman that he found a little more gas in room 8 than usual and he did not go back to his fire-mark or again go in and inspect that room for gas before
366 the explosion, although he continued to inspect the mine for his shift, did he or did he not, in your opinion, perform his duty with reference to that body of gas?

A. No, he did not perform it fully.

Q. Ought he not to have removed the gas?

A. It ought to have been removed when it was first discovered.

Q. And if it was not removed when it was first discovered it should have been removed when it was next discovered, should it not, Mr. Duggan?

A. Yes, it should.

Q. Now, if you had known of the existence of the body of gas which I have described to you, in room 8, of the 4th left entry of that mine, discovered on Monday morning and still there so far as anybody knows, at the time of the explosion, what would you have done about it?

A. I would have had it removed.

Q. If you had known, Mr. Duggan, in your capacity of superintendent of that mine, that on account of the accumulation of water in the 4th left back entry of that mine, the fire boss had not gone through there for more than a week, what would you have done about it?

A. Well, it would be owing to the extent of the portion of the entry that the water covered.

Q. Well, if you knew, say, that two or three hundred feet of the entry that the fire bosses were not going through on account of the water, for as much as a week before the explosion, would not you have had it removed?

A. Yes, I would.

367 Q. You understand the system of air measurement which was used in that mine?

A. Yes, sir.

Q. Do you know whether or not, in measurement of air which

goes into the mine, and air which comes out of the mine, you should get more air at the place of entry or at the place of exit?

A. Generally get a little more at the place of exit.

Q. Why is that?

A. It is owing to the temperature in the mine and outside; the difference in the temperature.

Q. Owing to the expansion of the air by heat?

A. Yes, sir.

Q. Well, if that is true, Mr. Duggan, why is it not conversely true that you get more air coming out of the mine than you get going in?

A. Sometimes the temperature in the mine may be cooler than it is on the outside.

Q. Take in the months of December, January and February. Do you think the temperature of the mine at that time would ever be cooler than the outside temperature?

A. No, sir.

Q. Then should you not, Mr. Duggan, in the months of December, January and February, get more air coming out of the mine then you get going in if the air passages are all right?

A. Yes, sir.

Q. Can you tell the jury why it was that when you measured the air going into the mine on the 23d of February, you got
368 28,700 feet of air going into the mine and only 24,668 feet coming out?

A. No, but the reason might be that the intake of the air was taken in one measurement, while the return was taken at two different points, and I think there was one point omitted at that time inside the first right. There is the return on the right side, coming in, two places, and on the left side it only came in in one place through the overcast.

Q. Might not another explanation be that there was some check in some air course?

A. That would not make any difference.

Q. It would come out just the same, would it?

A. If there is 28,000 feet of air going into that mine there would be about that much coming out over the fan.

Q. No check in the air course would affect that matter at all?

A. It might shake it slightly, but I don't think it would make that difference.

Q. But it might?

A. It might, some.

Q. The exhaust capacity of that fan was what did you say on your direct examination?

A. It is about 40,000 cubic feet a minute.

Q. That is the extent of the capacity of the fan, is it?

A. That is the capacity of the fan, what the manufacturers of the fan placed it at.

Q. Well, the air coming out of that mine has measured more than that many feet, has it not?

A. You mean at different times?

369 Q. At one time. Don't you know of a time when the air coming out of that mine as measured exceeded the capacity of the fan, as you stated?

A. Why, that might be so.

Q. How would you account for that, Mr. Duggan?

A. Well, if the capacity of the fan was $4,000 cubic feet per minute you might get a larger capacity than that for a certain length of time, but it would not be practicable to keep it up permanently on account of the wear and tear of the machinery.

Q. That fan did not have any capacity to pull more air out of that mine than went in, did it, Mr. Duggan?

A. Except the difference in expansion.

Q. And if there was only 20,000 cubic feet of air a minute going into that mine there could not any more air than that come out that way beyond the expansion by heat so as to measure more, but it could not in fact be any more, could it?

A. No, sir.

Q. When you measured the air in the mine on the 23d day of February, as I understand you, you took the measurements when the doors were all closed and everybody was out of the mine as far as you knew except yourself and the foreman, and on that measurement you got 28,700 feet per minute going in at the main slope, is that so?

A. Yes, sir.

Q. Was the fan running to its full capacity at that time?

A. No, sir.

370 Q. Why not?

A. We ran the fan according to the amount of air that was required in the mine.

Q. At what velocity was the fan running when you took that measurement on the 23d of February?

A. I think it was 75 revolutions per minute; that is my remembrance of it.

Q. That was the velocity at which the fan habitually ran, wasn't it?

A. Yes, up to that time.

Q. Now, Mr. Duggan, if the fan was running as usual, and all the doors in the mines were closed, and there was nobody in there, why was it, that you did not get as much air on the measurement going into the mine as you did when you measured it on the 9th of February?

A. For the simple reason that when I took the measurement on the 23d day of February all the trap-doors in the mines were closed and the entire amount of air going into the mine had to make the full circuit of the air course from the mouth of the slope to the foot of the slope, and the measurement I took the 9th of February was taken while the mine was being operated, and the trap-doors, were being opened and shut almost constantly and for instance there you can see where on the first right I got 20,000 cubic feet per minute on the 9th of February, and immediately after taking that measurement I knew that there was some trap-door opened and I

sent the foreman down to the 1st right or the 2d right—I don't remember which—and he found that door partially left opened,
371 which increased the air from 12,000 or 13,000 cubic feet per minute, what we should get there being about 20,000 cubic feet per minute.

Q. Now, as I understand you, when the mine is at work and the doors are being opened and closed, you should get more air with the same power at the fan, coming into the mine than you would with the place all closed and the mine not at work?

A. The capacity of the fan would be greater with a shorter length of air course, shorter return.

Q. Which would give the shorter length of air course, the mine in operation or the mine not in operation?

A. The mine in operation.

Q. Then you should have more air when the mine is in operation than when the doors are all closed and the mine is not in operation?

A. You would get larger air measurement at certain places.

Q. You would get larger measurement at the intake for instance?

A. Yes, sir.

Q. You would get larger measurements at the exhaust?

A. Yes, sir.

Q. How would it be at the foot of the slope?

A. It would be inclined to be less.

Q. You think that the proportion of the air at the foot of the slope should be less with the mine in operation than with the mine closed?

A. Taken on the average it would, say in ten hours there
372 would be more air at the foot of the slope in ten hours with the mine not in operation than it would when in operation.

Q. What becomes of the air that goes in at the main intake and does not go to the foot of the slope? It goes to the fan by the shortest route, does it not?

A. Yes, sir.

Q. On the map point out how it goes there.

A. Any air that went into the mine from the intake here and did not go to the foot of the slope, it would reach the fan through leaks on this side up to the return or union here, and it would reach the fan through leaks on the left side on the short return to the overcast.

Q. On the 23d of February, when you took that air measurement you got 28,700 feet of air a minute going into the main slope, and only 14,580 a minute at the foot of the slope before the split. That shows that 14,120 cubic feet of air per minute was leaking in that slope and returns to the fan by a shorter course, does it not?

A. Yes, sir.

Q. Do you think that a leakage of air in the main slope of the mine approximated 50 per cent. when the doors were all shut and the mine not in operation discloses a satisfactory condition of the air courses of the mine?

A. It is satisfactory if there is sufficient at all the working places and keep the mine in good condition.

Q. I want to know if in your opinion as a mining superintendent the fact that the air measurements taken on the 23d day of
373 February with the doors all closed and the mine not in operation, which measurements showed that almost 50 per cent. of the air supplied to that mine was being lost in the main slope before the split, if that, in your opinion, discloses a satisfactory state of the air courses of that mine?

A. Well, knowing the conditions of the mine and the amount of air required, I considered it all right.

Q. In other words, then, you considered a slope which will leak 50 per cent. of the air supplied to the mine as a perfectly good slope, sufficiently air-tight for the purposes of mining?

A. It would be owing to the conditions of the mine altogether.

Q. Well, how would it be, Mr. Duggan, if a slope was leaking more than 65 per cent. of the air which went into it? Will it still be a good slope in your judgment, sufficiently air-tight?

A. Well, I could not say about that; it would be owing to the conditions altogether.

Q. Is there any point of leakage in the main slope of the mine short of 100 per cent. which you would say indicated a bad slope, an insufficient slope?

A. I know that it is the theory that in this plan of ventilation in a slope of that depth at least 30 per. cent. of the air is lost before it reaches the foot of the slope.

Q. Now, how much more than 30 per cent. must be lost before you as a mining superintendent would pronounce the slope insufficient?

374 A. It would be owing to the amount that was going to the faces and the condition of the mine.

Q. If 90 per cent. of the air was lost you would not still be willing to pronounce the slope bad or insufficient, would you?

A. Well, if there was 90 per cent. lost I presume it would be bad.

Q. How would it be if it were 80 per cent.?

A. I would consider it bad.

Q. How would it be if it were 70 per cent.?

A. It would not be very good.

Q. How would it be if it was 65 per cent.?

A. That would be owing to the conditions required at the faces.

Q. Did you know, Mr. Duggan, that for ten days to 2 weeks before the explosion there was an opening from the return air course to the upper air course leading to the plane on the 4th left, whereby air went to the men on that plane and thence to the 3rd left without going to the other working places?

A. No, sir, I knew of no such opening.

Q. If such an opening were made by the fire boss under the direction of the mine foreman, should it have been reported to you?

Mr. TWITCHELL: Objected to as improper cross-examination, and

as being a hypothetical question based upon facts not testified to by the witness or anybody else.

Objection sustained. Plaintiff excepts.

Q. You appointed John Donohue foreman of the White Ash mine, didn't you?

375 A. Yes, sir.

Q. Do you know whether he had ever been foreman of a mine before or not?

A. Not to my knowledge.

Q. Mr. Duggan, you have testified upon your direct examination that after the explosion you went down into the mine and did certain things and that afterwards you went down with the coroner's jury, and they made an investigation. State, if it is not true that from the night of the explosion when the last body was gotten out until the coroner's jury went down the defendant company and you had as its representatives were in possession of the White Ash mine excluding all persons therefrom except the servants of the company?

A. Yes, with the exception of one man.

Q. What man was that?

A. That was the Government mine inspector.

Q. Did he go in between the time of the explosion and the time the coroner's jury went in?

A. I think he did.

Q. Are you sure of that?

A. No, I'm not.

Q. Well, now think it over and say if you are not sure that he did not?

A. I could not say whether he was or was not. All I know is that he was there for several days after the explosion, and had the privilege of going in at any time he wanted to.

Q. The coroner's jury inquest was going on for several days after the explosion before the coroner's jury went down into the mine, wasn't it?

376 A. I don't know, I wasn't present; I believe it was though. Oh, yes; I misunderstood the question; yes.

Q. Now, during that interim between the night after the explosion and the time when the coroner's jury went down, were not you working every man that you could work in that mine, running night and day pumping out water and putting in brattice?

Mr. TWITCHELL: Objected to as improper cross-examination, anything done subsequent and any changes made subsequent to the explosion, that time subsequent to the explosion, is certainly improper and immaterial.

Objection overruled. Defendant excepts.

Mr. FIELD: The purpose of this testimony is simply to show—and I wish the court to instruct the jury at the time that they take it, that it is for this purpose and none other—that on the direct examination this witness has detailed to the jury a condition which he found there when he went down with the coroner's jury, and this evidence is offered not for the purpose of showing changes by the

company subsequent to the explosion, but for the purpose of showing how the conditions were that the witness testified on his direct examination existed.

Mr. TWITCHELL: The same objection.

Mr. FIELD: This is not for the purpose of showing any changes that were made that would obviate like accidents in the future. We ask the court to say to the jury that evidence of what was
377 done by the defendant company between the time of the explosion and the going down of the coroner's jury is not to be considered by them as any evidence of any imperfection existing in that mine prior to the explosion, but is to be considered by them merely as throwing light upon the facts which this witness upon his direct examination testified were found there when he went down with the coroner's jury.

Objection overruled. Defendant excepts.

Mr. TWITCHELL: Before the court instructs the jury the defendant by its counsel objects to any instruction from the court to the jury with reference to any evidence from the witness following the question as propounded by counsel for the plaintiff, for the reason that the evidence given by the witness speaks for itself and that under the law the court has no right to limit the effect or weight, or comment upon the weight, of any evidence given in this case, the instructions of the court being a comment upon the weight of the evidence.

Mr. FIELD: We will confess the objection and ask the court not to say anything to the jury and let the witness answer the question.

The COURT: Very well. I will sustain the last objection and give no instructions and let the witness answer the question.

Defendant excepts.

A. We were working a force of men, both night and day, getting the mine into working condition from the results of the ex-
378 plosion between the night after the explosion and the investigation of the coroner's jury.

Q. Unless that had been done it would have been impossible to go into the mine, would it not, Mr. Duggan?

Mr. TWITCHELL: Objected to as calling for an opinion of the witness and the facts speak for themselves.

Objection sustained. Plaintiff excepts.

Q. Well, you have not answered my question as to whether or not you were hauling out water night and day during that period.

Mr. TWITCHELL: Objected to on the ground that he has answered the question. And the same objection as being evidence calculated to call for the evidence with reference to changes made subsequent to the explosion, and not proper cross-examination.

Objection overruled. Defendant excepts.

A. We were taking out some water in connection with the other work that we did.

Q. You stated that you discovered evidences of explosion in that

mine beyond room 8 towards the slope, what were they? unless I misunderstood you.

A. All the evidence of explosion that I saw between room 8 and the slope would be some scorched props in the room and some canvas that was twisted or torn down.

Q. Scorched props in room 8? You said between room 8 and the slope.

379 A. Yes.

Q. Did you find any scorched props between room 8 and the slope?

A. I don't remember finding any.

Q. You remember finding scorched props in room 8, don't you?

A. I remember finding some that were slightly scorched.

Q. Was the last prop up towards the face scorched?

Mr. TWITCHELL: Objected to for the reason that he has not designated which last prop. In room 8 there were in all probability a number of last props. I think it should be confined to the particular prop.

Objection overruled. Defendant excepts.

A. I remember that the props up towards the face of the room were less scorched than those further down.

Q. And you also remember that there was no evidence of fire at the face of the room, don't you?

A. My remembrance is that there was very little evidence of fire at the face of room 8.

Q. Is it not your remembrance that there was no evidence of fire in room 8?

A. Well, I don't remember that it was just exactly that way, right at the face. My remembrance is that 12 or 15 feet from the face the evidence of fire was very little.

Q. And as you now remember the matter you have no recol-

380 lection of having seen any evidence of fire further up towards the face than 12 or 15 feet?

A. No, sir.

Q. In that mine you found numerous unexploded powder cans after the explosion, did you not?

A. I don't remember as to that; I might and I might not; I would not have paid any attention to those.

Q. Did you not find an unexploded cartridge at the face of room 12 set up against the coal?

A. I don't even remember having seen that there; I heard of it, though.

Q. Did you find miners' coats and dinner buckets in those rooms undisturbed by the explosion?

A. I remember of seeing in one instance a miner's dinner bucket undisturbed in one of those rooms.

Q. You remember seeing a coat that was undisturbed in one of the rooms?

A. I remember seeing coats, but I don't remember whether they were undisturbed or not.

Q. You stated upon your direct examination that in your opinion the force of the explosion went into the back entry on the rebound. Now, why do you think it went in there on the rebound, instead of going on its direct course?

A. Because that would be its direct course according to my idea of it in the rebound.

Q. I suppose we don't understand each other. Is it not your theory that this explosion went against the air?

381 A. It went against the air, and wherever the most air was it would go both ways.

Q. It is your theory that it went both with the air and against the air?

A. My theory is that the main force of the explosion went against the air, and some of the explosion would go with the air if there was a large body of air close to it, to the side of where it originated.

Q. Is it your opinion, Mr. Duggan, that the flame would depart from the air current?

A. No, sir.

Q. If there was evidence of flame in the 4th left air course before getting to the water, that is conclusive evidence, is it not, that that flame got there following the air current?

A. Yes, sir.

Q. Then, if there was any further violence exerted by that explosion, it must have been exerted after the explosion met with resistance in the 4th left air course?

Mr. TWITCHELL: Objected to as being a hypothetical question based upon the supposition that there was an obstruction in the 4th left air course, of which there is no proof.

Objection overruled. Defendant excepts.

A. My theory is that the force of the explosion went to the face of the 4th left main entry, going against the air, and it continued going against the current of air and rebounded into the 4th left back entry.

382 Q. I don't understand what you mean by the word "rebounded;" it didn't rebound as long as it was following the course of the air current, did it?

A. Well, if it didn't rebound it turned a circle or turned a corner and came around and came into the back air course of the 4th left.

Q. Now, is it or not your opinion that the force of that explosion met with an obstruction in the 4th left air course?

A. It might have met with some at the time that the force of the explosion reached there from the inside end of the back air course, for the simple reason that all the stoppings were blown out there between the back and main.

Q. Now, if it didn't meet with resistance or obstruction in the 4th left air course, would it not have gone right on down to the bottom of that mine?

A. Not necessarily so.

Q. Why not?

A. Owing to the force of the explosion.

Q. Well, if there was enough of it left to rebound, there must have been enough of it left to go on, is that not so?

A. Why, it might have expended its force before it reached the obstruction, if there was such an obstruction there.

Q. Well, if it did expend its force before it reached the obstruction there never would have been any rebound, would there?

A. There would have been a rebound if it reached the face of the 4th left main.

383 Q. Well, there was no evidence of flame at the face of the 4th left main entry?

A. I don't remember just now whether there was or not. The canvas was all torn down there.

Q. If the men who were working, the entry men in the 4th left were not scorched in any way, and there was no evidence that the flame went to the face of the 4th left entry, what becomes of your theory in your judgment, that the flame went there and rebounded?

A. Men were not found in there at the time; they were found out near the last cross-cut.

Q. Now, if one of the men was found at the entry and he was not burned and there was no evidence of fire at the face of the 4th left main entry what becomes of this theory of yours about the flame having gone there and rebounded? Do you still adhere to it?

A. The indications would be that the flame did not reach to that extreme point.

Q. What, in your opinion, caused this calamity in the White Ash mine, Mr. Duggan?

A. Well, all I know to a certainty is that I know powder exploded down there, and I know that coal dust ignited there, and I think there was some indications that some gas had been exploded. I think that there was no doubt that it was a combination of powder, coal dust, with some gas that may be in the air.

Q. Now, that theory involves the idea that there was an ignition of powder in some of the working places of the 4th left at 10.45 on the morning of the explosion, does it not?

384 A. Ignition in what way, any way?

Q. Yes; some way.

A. Yes; it might in some way.

Q. Now, that was not a regular hour for the ignition of powder, was it?

A. No, sir; it was not; but it was a time when men would be making up their cartridges and handling their powder.

Q. That theory also involves the idea that if there was an explosion of powder that there should have been such a report as ordinarily accompanies the explosion of powder, does it not?

A. Not necessarily so.

Q. You think that this might have been a powder explosion without any report? A certain quantity of powder could be confined within a certain space in order to create a report, but it has to be confined in order to create any damage too, does it not?

A. No, sir; not necessarily so.

Q. You think that unconfined powder exploded in room 16 or 17 of that mine might kill men in room 8, for instance?

A. I simply said that if powder was exploded in 16 or 17 that the force of that powder being ignited would ignite coal dust in the mine, and all of the air in coal mines is more or less impregnated with coal dust, and this coal dust would be ignited, and if there was any gas in the air in the mine, that would also be ignited if the percentage was over 4 per cent.

385 Q. Is it not absolutely true, Mr. Duggan, that what you found in that mine after the explosion conclusively convinces you that, at the time of the explosion, there was gas in room 8 of that mine and that the explosion of that gas killed the men who were killed in room 8?

A. No, sir, not by any means.

Q. You are sure that is not so, are you not?

A. I am not positive it is not so, but there is evidence, there is strong evidence that the seat of the explosion was in room 16 or 17, rather than in any other place.

Q. Now tell this jury what this stronger evidence was.

A. There is more evidence of that and props being burned and coal dust being turned into coke, and a loaded car that was moved some distance from the track, sideways, and things in general there showed more indications of force and violence than any other room in the 4th left entry.

Q. And that was evidence to your mind that that was the seat of the explosion?

A. Yes, sir.

Q. Now, let us see, Mr. Duggan, what you expect to find in a gas explosion, pure and simple, indications of the greatest heat and violence at the place where it started?

A. I have seen gas ignited——

Q. Can you answer the question?

A. I would expect to find it very close to the point.

Q. Would you expect to find it right at the place where it started?

A. Not exactly at the point, but close to it.

386 Q. Why would you not expect to find it exactly at the point?

A. Because the force would increase right shortly after it was ignited.

Q. And it would increase in violence as it traveled against the air, would it not, Mr. Duggan?

A. No, sir, not all the way.

Q. As long as it was accumulating gas and being fed by air, would it not increase in violence?

A. No, sir, not to the full extent of the force.

Q. You know all about gas explosions, do you?

A. No, I don't think I do.

Q. How many did you ever see?

A. I have seen gas ignited several times, and an explosion of gas is simply the ignition of a very large body of gas.

Q. Did you ever see an explosion of gas where human life was lost and destruction of property occur, except the one under consideration here?

A. I never experience- any others.

Q. Now, if there had been gas in 8 and 9 and 10, 11 and 12 and 13 and 14, and 15, and 16 and 17 of the 4th left entry of that mine, and the gas was ignited in room No. 8, would you not expect to see the greatest evidence of explosion and violence in 16 and 17?

A. More so than in room 8?

Q. Yes.

A. No, I don't know why I should altogether.

Q. Would you or would you not?

387 A. Well, I don't know whether I would or not.

Q. And the fact of the business is, Mr. Duggan, that you don't know anything about this, and that you are trying to speculate, theorize upon some theory that would result in releasing the defendant company from liability, is that not so?

Mr. TWITCHELL: Objected to.

Objection sustained. Plaintiff excepts.

Mr. FIELD: I offer to prove the affirmative of the question by the witness and except to the ruling of the court.

Q. How much powder was used on the 4th left entry of that mine on the day shift when it was working a full complement of men?

A. Probably four or five kegs.

Q. Do you know how much?

A. No, sir, I do not; but it varies at times owing to the condition of the coal.

Q. It might be twice four or five kegs, might it not?

A. No, sir, I think not, not with that number of men in there.

Q. How many men?

A. There were about 24 miners working in there, I believe.

Q. How much powder would two miners use on a shift?

A. They would use from 4 to 6 pounds probably.

Q. 4 to 6 pounds each or 4 to 6 pounds both?

388 A. I say it varies. It might be both sometimes, in driving their room ahead, then they would use more powder than at other times, and in shooting off the butts they would not use so much, and also in turning rooms in room necks.

Q. For all that you know to the contrary there might have been as much as 200 to 250 pounds of powder on a shift exploded at times in that 4th left, in the regular course of mining coal there?

A. No, I don't know that there was that much.

Q. Half that much?

A. That would be my idea of it, on the average.

Q. You say you helped to take the bodies out of that mine?

A. Yes, sir.

Q. Whose bodies did you help to take out?

A. I assisted in taking out all of them with the exception of Flick

and Kelly, and I remember that I discovered one of the bodies of the Deserants, Henri Deserant, Jr.

Q. Did you find Donohue's body?

A. I don't remember whether I was with the party when he was discovered or not. I was right there when he was brought down.

Q. Did you find Kelly's body?

A. No, sir.

Q. Now, you say that there was about the same quantity of coal mined in February that had been mined in January?

A. Yes, sir.

389 Q. The same number of working days in each month?

A. I don't remember as to that.

Q. Don't you know that there was at least—counting the same working days—that there was at least 33 per cent. more coal taken out of that mine in February than there was taken out in January?

A. No, sir, I do not.

Q. Do you know it was not so?

A. I know positively that it is not so.

Q. You say that there was about 200 tons — of coal taken out in February than were taken out in January?

A. I think about that.

Q. And you say you don't know anything about the number of working days?

A. No, I don't remember now.

Q. Well, if you worked every day and took out 200 tons more of coal in less than 27 days in February than you took out in 31 days in January, that would show an increase of more than 20 per cent., would it not?

Mr. TWITCHELL: Objected to. There is no testimony here that there was 31 working days in January, nor is there any testimony that there was 27 working days in February.

Objection overruled. Defendant excepts.

A. In that respect it would be owing to the force of men working in January and working in February.

Q. (Question repeated.) Do you think men are involved in that question at all?

390 A. I think it is.

Q. What figure does the number of men cut in that question, Mr. Duggan?

A. Well, if 100 men would produce a certain quantity of coal in a certain number of days in February, or in any month, in a given time, it would be no more than reasonable to expect that double the quantity of men would produce double the quantity of coal in one-half the time.

Q. In working, as the mine was worked during the month of January, a little more than 1,200 tons of coal were produced during the 31 days of that month, and working as that mine was worked up to the time of the explosion in the month of February, 200 tons more of coal was produced in less than 27 days of the month of

February, does that not show an increase of output for February over January, day for day, amounting to more than 20 per cent.?

A. It does in proportion to the number of days worked.

Q. Did you have any record of the amount of water that was hauled out of that mine?

A. No, sir.

Q. Never did keep any record of that?

A. No, sir.

Q. Now, if anybody in authority in that mine directed the roperiders to haul water out of that mine in preference to coal, were those orders proper or improper?

A. I don't know that would be owing to circumstances and conditions.

391 Q. Well, if water was not hauled out of that mine it would certainly accumulate in the mine, would it not?

Mr. TWITCHELL: Objected to for the reason that it calls for a conclusion of this witness.

Objection overruled. Defendant excepts.

A. If water was not hauled out it would certainly accumulate if it was making water.

Q. The mine did make water, didn't it?

A. Some parts of it.

Q. You never knew the 4th left entry when it was not making water, did you?

A. I knew when it was making practically no water, you may say.

Q. Didn't that 4th left air course make water from the time it was driven?

Objected to as improper cross-examination. Objection overruled. Defendant excepts.

A. What I term it, "practically no water," would not be significant; it would be very insignificant.

Q. You thought it was insignificant at the time of the explosion, didn't you, the quantity of water that was there?

A. I didn't know of the water in any way interfering with the condition of the mine at the time of the explosion.

Q. But you took no precautions to find out whether it was or was not, did you?

A. Yes, I did.

Q. What did you do?

392 A. We had a syphon put in the 4th left back entry to take the water from there.

Q. But you did not see that syphon within a month before the explosion, did you?

A. I don't remember whether I did or not.

Q. And that is what you call taking precautions against the accumulation of water, is it?

A. There was a man under me to perform that kind of work and it was his duty to do it.

Q. But you didn't know whether he did it or not, did you?
A. I presumed that he did.
Q. But you did not know whether he did it or not?
A. Did what?
Q. Do you understand the question, Mr. Duggan?
A. I have forgotten just exactly what it is, now.
Q. But you did not know whether he did it or not, did you?
A. If he knew the water was there and interfered with the ventilation of the mine, he didn't do his duty.
Q. And if the water was there and did interfere with the ventilation of the mine, it was his business to know it, was it not?
A. Yes, sir; it was.

Court adjourned till 2 p. m.

Court met pursuant to adjournment.

393 Redirect examination.

By Mr. TWITCHELL:

Q. Mr. Duggan, you were testifying on cross-examination this morning with reference to the various servants and kind of services which you had performed in your capacity as a miner. I will ask you whether or not your duties as superintendent of the White Ash mine and the various properties located there, over which you had been placed in charge, required a man cognizant of the workings of the various kinds of machinery both on top of ground and underground, and with a varied experience in matters in connection therewith?

Mr. FIELD: Objected to as improper redirect examination.
Objection overruled. Plaintiff excepts.

A. Yes.
Q. What experience had you had in the matter of handling machinery and things of that kind?

Same objection. Objection overruled. Plaintiff excepts.

A. My experience in handling machinery; I fired steam-boilers, operated steam-engines, I have learned the machinist's trade, I have went to a drawing school at night; I put in large Cornish pumps into mines and what is known as "drawing lifts" in mines, and operated diamond-drill machinery.

394 Q. You testified this morning that you could not make a map like that (referring to map on blackboard). I will ask you if in the operation and conduct of the White Ash mine you had anybody under you who could make such a map?
A. Yes, sir.
Q. Who was he?
A. J. C. Porterfield, M. E.
Q. Was he the same Mr. Porterfield who testified in this case last week?
A. Yes, sir.

Q. This morning in your testimony you identified this book, Exhibit "B," as the contract book signed by the miners, beginning with the 6th day of May, 1893, up to May, 1896. Is this the book that you identified this morning?

A. Yes, sir.

Mr. TWITCHELL: I will offer so much of this book in evidence as contains the rules and regulations or what purports to be the rules and regulations regarding the White Ash mine and the two signatures of the Deserants, the same as in the last trial. I have forgotten the last page.

Mr. FIELD: We offer the balance of the names up to the 27th of February, 1895.

Exhibit "B" as read to the jury is as follows, to wit:

395 CERRILLOS COAL R. R. CO.,
LOS CERRILLOS, N. M., 5, 6, '93.

Rules and Regulations Governing the White Ash Mine.

To employés:

This company in starting its work up, desires all persons whom it may see fit to employ to understand that it will do all in its power to protect them in their just rights, that it will treat all employés with square and exact justice, and do everything in reason to advance the prosperity and happiness of its employés. To this end it will discourage all drunkenness and other demoralizing influences. It will not knowingly employ bad men, who are continually getting up strikes and dissatisfaction among employés, or threatening the lives and property of peaceable citizens, and will discharge all such from its employ as soon as found out. In order that there may be a full and complete understanding between the company and its employés, the following rules and regulations are hereby agreed to, and adopted by the company, for the government of its mines. Its superintendent and other officers are hereby commanded to enforce them in such a manner as to secure equal justice to all concerned.

1. *Favoritism.*

396 No officer or other responsible person will be permitted to have favorites, or show favoritism to any person or persons in the mines. Every person is expected to stand or fall on his own merits, and any officer having favorites must dispense with them or resign his position.

2. *Committees.*

No mine committee, or pit committee so called, will be allowed to interfere in any manner with the operations of the mines, or any matter pertaining thereto. Any employé having a grievance, or any other matter, to settle with the company is expected to go to the pit boss and superintendent, and settle it in a manly way. The

company wants no employés who are slaves to any committee, or who dare to not ask for their just dues like men.

3. *Employing Men.*

No person or persons whether employed by the company or not, will be permitted to dictate who shall be employed or discharged or to interfere in any way or manner in such matters. The company has secured the services of experienced mining superintendents, who will deal justly with men employed, who will give gentlemanly treatment to all, and expect the same in return.

4. *Prices for Dead Work.*

397 The superintendent and the pit boss will fix the prices on dead work by agreement with the parties doing the work, and such decisions shall be final.

5. *Turn of Pit Cars.*

No discrimination will be made among miners in the handling of their coal. Each and every miner shall have his turn of the cars as fast as he can take and fill the same, provided that he can furnish; miners shall not interfere with each other in their rooms or entries as to the quantity of coal they shall get out, but each miner will attend to his own place and get all the coal he can.

6. *Preparing Coal.*

Miners will be required to send out coal free from dirt, slate, rock, or bone, so prepared that twenty-four hundred (2,400) pounds of "run of mine" shall yield two thousand (2,000) pounds of screened coal. In case this article is not complied with, it will be the duty of the company's weighman to make such deductions as he sees fit for the first offense; and for the second offense the miner will be discharged.

7. *Price for Mining.*

Each twenty-four (2,400) hundred pounds of coal prepared and loaded, as specified in article 6, the company will pay the miners the sum of seventy (70) cents.

398 8. *Check Weighman.*

The miners may elect a check weighman, who shall be a working miner at the time of such election, and who shall be satisfactory to the company. The meeting which elects such a check weighman shall notify the superintendent, in writing, of the name of the person elected. The check weighman not being employed or paid by the company, cannot be allowed to dictate to any of the employés of the company in any manner whatever. He will be permitted to see

all coal weighed, to examine the scales when not in use, and to report to miners the quantity of coal sent out by them, and its condition, as to proper preparation, loading, etc., as specified in article 6. The company will not recognize him in any capacity whatever. In case the check weighman shall at any time become unsatisfactory to the company, the miners shall upon ten (10) days' notice of that fact by the superintendent, proceed to and elect another check weighman under the conditions set forth in this article.

9. *Sharpening Tools.*

The company will employ a blacksmith to sharpen miners' tools, and for such sharpening of tools, a monthly sum of fifty (50) cents will be collected from each and every miner working by contract.

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10. *Oil.*

No free oil will be furnished to any employé.

11. *Physician.*

The company will elect and appoint a first-class physician and surgeon, who shall be satisfactory to the majority of the employés, and will collect on its pay-rolls the sum of one ($1.00) dollar per month from each miner, and from each person in its employ, which shall cover all services rendered, or medicine furnished to employés, or their families, except that the said physician may charge a small additional sum not to exceed ten ($10.00) dollars in cases of child-birth, and may charge the regular current physicians' fee for all cases of venereal or private nature. Employés leaving the service of this company, or who are discharged, thereupon shall forfeit all right, title and interest in or to any part or all of such service.

12. *Drunkenness.*

The practice of drunkenness is fraught with great danger, and unfits the workingman for his work. Employés who neglect their work on account of drunkenness will be discharged and not again employed.

13. *Distribution of Powder.*

For the safety of the miners, the company has appointed a man on top of the mine for to deal out the powder to the men.
400 No miner is allowed for to take down more than — five (5) pound powder can in the pit for one day's work, and each and ever- miner is to have a box in his place for to keep the powder in.

14. *Absence from Work.*

Any employé desiring to be absent from work more than one (1) day shall give notice of that fact to the pit boss, or proper foreman,

stating how long they desire to be absent. Any employé not complying with this rule will be understood to have abandoned their work and left the service of the company, and their places will be filled with others. In case of sickness or other unavoidable absence from work, employés will send notice to their pit boss or foreman, in order that their places may be retained for them.

15. *Hours of Labor.*

Ten (10) hours will constitute a day's work, or sixty (60) hours to the week.

16. *Riding on Loaded Pit Cars.*

No person except the driver will be permitted to ride on the loaded pit cars.

17. *Report Unsafe Places.*

All employés are requested to report any unsafe place to the mine boss, who shall at once have the same repaired and permit no
401 one to enter therein until it is put in proper condition. Reckless persons, or those having no knowledge of mining, will not be permitted in the mine. The mine boss will personally examine the mine and know all parts thereof are in safe condition.

18. *Close Doors.*

Employés passing through doors in any entry or air way and neglecting to close the same will be discharged.

19. *Penalty for Stealing.*

Any employé taking tools, timber or material of any kind not belonging to him will be discharged from the company's employ.

20. *Abuse of Stock and Waste of Company's Property.*

The abuse of mules, or destruction or waste of the company's property will not be permitted. Any violation of this paragraph will be considered as grounds for discharge.

21. *Intoxicated Persons Not Employed.*

Quarrelsome or intoxicated persons will not be permitted in or about the works.

22. *Visitors.*

No person or persons except those employed therein will be permitted to enter the weigh office or speak to the weighman while on duty. Visitors will not be permitted to enter the mines without permission from the superintendent.

402 23. *Settling with Discharged Employés.*

Any employé discharged from the works will be required to leave his place in good condition, to deliver any company property in his possession to the mine boss, and if he occupies a company house to vacate the same, and deliver the keys to the office before a final settlement and payment for his services will be made. Any employé neglecting or refusing to keep his place in good condition will be discharged from the work and the cost of putting his place in proper shape deducted from any balance due him.

24. *Timbering.*

To avoid accidents the company will not knowingly employ inexperienced men. All miners are cautioned to timber their places for their own safety. The miners will make application to the pit boss for such timber as they require and always keep a sufficient supply of timber in their places to avoid any accident. All the timber will be furnished by the company free of charge. The company will not be responsible for any accident occurring at any working place or room or entry nor at any other part of the mine if caused by carelessness or neglect of the party injured.

25. *Schedule of Prices.*

For driving cross-entries	$1.75	per yard
" " " cuts in cross-entries	2.00	" "
" " " " " rooms	2.00	" "

403 The company will only pay for the first two cross cuts in each room. Turning-room, thirty-foot neck, 8 feet wide, $8.00.

All the draw-slate which comes with the coal is for to be cleared up by the miner without any extra charge, also to load all the water which might be in their places. In order that the foregoing rules and regulations may be binding, and in force on both the company and employés, the Cerrillos Coal Railroad Company has caused these presents to be signed by its manager and by each and every one of its employés, and such signing on the part of its employés is hereby declared to be necessary preliminary to the procuring of work.

Signed on the part of the Cerrillos Coal Railroad Company at Los Cerrillos, N. Mex., this — day of ——, 1893.

CERRILLOS COAL RAILROAD COMPANY,

By —— ——, *Manager.*

We, the employés of the Cerrillos Coal Railroad Company, have read the foregoing rules and regulations, or have had them read to us, singly at the time of signing these presents. And do hereby, each for himself and none other, agree to abide by the said rules

and regulations and accept them in good faith with a full understanding of all they contain and require. Signed at the place and time set opposite each of our names. We, the undersigned,
404 further agree to and accept the foregoing rules and regulations for a term of three years from May 1, 1893.

We, the undersigned, agree to and accept the foregoing rules and regulations for a term of three years from April 1, 1893.

The foregoing rules were signed in said book with four hundred and sixty-one names, beginning with Josef Gabert, under date of April 3, 1893, and ending with Joseph T. McCart, under date of February 22, 1895, the name of Henri Deserant appearing under the date of April 10, 1894, and the name of Jul Deserant appearing under date of May 12, 1894, while the name of Henri Deserant, the younger, does not appear at all.

Q. You also testified on cross-examination that water was allowed to remain in the air course. Did the allowing of the water to remain in the air course, about which you testified, in any way interfere with the air circulation of the mine?

A. Not in any practicable way, the amount of water that was there.

Q. You had men under you, didn't you, Mr. Duggan, who were charged with the matter of looking after the collection of water in the air courses and various other parts of the mine?

A. Yes, sir.

Q. You testified about telling Donohue about keeping the mine free from water, did that, or did that not, necessarily mean that he should allow no water to remain in the mine, or did it refer to the permitting of water to remain in the mine which would obstruct the air circulation?

405 A. Do you mean about having all the water taken out of the mine that would not in any way interfere with the ventilation of the mine or the workings of the mine?

Q. I will ask you whether or not under the hypothetical question which was given you by Mr. Field this morning with reference to the presence of gas in any particular locality in the mine a fire boss would have performed his duty when he marked it with the danger signal commonly in use in that mine?

A. Yes.

Q. I will ask you whether or not on the Sunday and Monday prior to the explosion, room 8, in the White Ash mine was or was not a finished room?

A. Room 8 was finished on Monday morning; the last work done in there would be on Sunday night.

Q. If the current of air such as was passing through the mine on the eight days prior to the explosion, which you testified you were in the mine——

Objected to. He has not so testified.

Q. Were you in the mine during the eight days prior to the explosion?

Objected to as improper redirect examination.. Objection overruled. Plaintiff excepts.

A. Yes, I was in the White Ash mine every day for eight consecutive days with the exception of the Sunday previous to the explosion.

406 Q. If a current of air such as was passing through the White Ash mine on any one of those days was passing up against the face of room 8 on the morning of the explosion, or at the time of the explosion; please state whether or not that current of air would carry out any gas which was being generated in that locality.

A. I think it would if everything was in proper condition up there.

Q. If on the Sunday night prior to the explosion gas was moved out of room 8 by Mr. Kilpatrick, and at the time two men were working at the face of room 8, and Mr. Kilpatrick put up a fire boss's danger signal there, state whether or not any duty which was charged upon Mr. Kilpatrick had or had not been performed.

Mr. FIELD: Objected to because it is a hypothetical question not based upon the evidence of Mr. Kilpatrick and in direct conflict with it.

Objection sustained. Defendant excepts.

Q. I will ask you now, Mr. Duggan, whether or not by the placing of such a danger signal as was accustomed to be placed in the White Ash mine in order to denote the presence of gas or danger was or was not a proper and sufficient precaution against any danger, whether of gas or any other combustible.

A. Yes, that was a sufficient precaution.

Q. I will ask you this hypothetical question: Supposing that room 8 of the White Ash mine there was a danger signal placed upon a tie across the railroad track, denoting the presence of

407 gas or any other danger and that danger signal consisted of a double cross, DANGER, FIRE, and two animals, or two men, Flick and Kelly, went over that danger signal, without a previous examination of the place by some person in authority, were they or were they not disobeying orders in the White Ash mine when they crossed over such a fire or danger signal.

Mr. FIELD: Objected to as not proper redirect examination and as a hypothetical question not based upon the evidence in the case.

Objection sustained. Defendant excepts.

Q. You spoke about leaks when you spoke about the air circulation. What do you mean by leaks?

A. Air passing through the stoppings.

Q. Any other kind of leaks?

A. Air passing through the trap-doors.

Q. I will ask you whether or not in the operation of the mine it is necessary at times for the trap-doors to be opened?

A. Yes, sir.

Q. And when you spoke of leaks of that kind state whether or not you spoke of leaks necessary in the operation of the mine.

Mr. FIELD: I object to that question as leading and suggestive.

Objection overruled. Plaintiff excepts.

A. Yes.

Q. In the system which was in operation for the ventilation
408 of the White Ash mine, on the 27th day of February, 1895, what is the percentage of air coming in at the main intake which is always lost by friction or leaks before it would reach the foot of the slope of the length of that one in the White Ash mine?

A. The theoretical loss is thirty per cent.

Mr. FIELD: I move to strike out the answer of the witness as not responsive to the question.

The COURT: The last answer, gentlemen of the jury, of the witness is that the theoretical loss is thirty per cent. It is withdrawn, is not before you in evidence, and you will not consider it so.

Q. What is the loss, Mr. Duggan?

A. The loss would be according to the condition of the stoppings and the size of the air course.

Q. What is the theoretical loss?

A. It would be about thirty per cent.

Q. In your testimony this morning, Mr. Duggan, you stated that you had never done or had any experience except in the one gas explosion which happened in the White Ash mine. I will ask you whether you ever read or studied or heard about any explosions.

Mr. FIELD: Objected to unless he read or studied or heard about them before this one.

Q. I refer this one to before the explosion in the White Ash mine.

A. Yes, I have read of explosions before the one that took place in the White Ash.

Q. Had you ever prior to the 27th day of February, 1895,
409 studied into the cause of explosions and things of that kind, either in books or newspapers or sources of that kind?

A. Yes.

Q. Can you tell how many days the White Ash mine was working during February, 1895?

A. Yes, sir.

Q. How many?

A. 20 and a half days.

Q. Can you tell how many days the White Ash mine was working during the month of January, 1895?

A. Yes, sir.

Q. How many?

A. Twenty-three days.

Q. Can you tell how many days the White Ash mine was working during the month of December, 1894?

A. Yes, sir.
Q. How many?
A. Either 18 or 18½, I don't remember which.

Recross-examination.

By Mr. FIELD:

Q. How could you find out, how did you find out these things? You could not tell them to me when I was cross-examining you?
A. Taken from the records.
Q. Did you keep the record?
A. Kept right in my office.
Q. Did you keep the records?
A. I didn't do it myself personally.
Q. Where are these records?
A. They are down at the Palace hotel.
410 Q. Well, you had better produce them here for us to inspect. I want those records the next thing. If you have testified from any other record I want them, too.
Q. What books had you read treating of gas explosions in coal mines prior to the 27th of February, 1895?
A. I read one book, I don't remember the name of it, that I got from Mr. Donohue and I read another book known, I think the title is "Mine Ventilation," and another book entitled "The Colliery Engineer Pocketbook," and another book that I have got; I don't remember—it is the key to something—I have forgotten what it is just now.
Q. Who wrote these books that you read?
A. I don't know. I think one was written by Atkinson. I ain't certain or sure. The others, I don't know who is the author of them.
Q. Did you ever read a book entitled "Gases Met with in Coal Mines and Freaks of Air in Mines," the production of J. J. Atkinson, Government inspector of mines for the county of Durham in England?
A. No, sir.
Q. Did you ever hear of it?
A. I have heard of his works and read some books written by him, but not the one that you mention.
Q. Do you know whether or not he is regarded as a standard authority on gases and ventilation in coal mines throughout the world?
A. Yes, I know that he is, although I have seen other authorities different from him.
411 Q. In the course of your studies, however, you never thought it necessary to ascertain what he thought on these subjects?

Objected to as immaterial. Objection overruled. Defendant excepts.

A. I don't know that I did; I might or might not.

Q. When you say that the theoretical loss of air which ought to occur in such a shaft as the White Ash slope is 30 per cent.; just what do you mean?

A. I mean that I have seen from a French author that that is the theoretical loss.

Q. Didn't you see from the first author that a loss exceeding 30 degrees indicated a defective slope?

A. I don't remember of seeing anything of the kind.

Q. Did that authority attempt to give you the dimension of the slope which ought to lose 30 per cent. of the air?

A. No, sir.

Q. You have read somewhere that there might be such a thing as the loss of 30 per cent. of the air by friction in the main slope, have you?

A. No, sir.

Q. Never have read that?

A. No, sir, not to my knowledge.

Q. When you say that the theoretical loss is 30 per cent., do you mean to say that a loss exceeding 30 per cent. was too much or not?

412 A. I assume from that that if the loss would not be greater than 30 per cent. that the conditions of all the stoppings and the slope were good.

Q. Well, if the loss was twice that would you still assume that they were good, would you not, Mr. Duggan?

A. That would be owing to the conditions as necessary to ventilation in the mine. It would not be as good as though there was only 30 per cent.

Q. You testified upon your redirect examination that you were in the mine for 8 consecutive days, exclusive of Sunday, before the explosion. Do you mean by that to say that you were in every part of the mine on every day of those eight days?

A. No, sir.

Q. On what part of the mine were you on the day of the explosion, if any part, before the explosion?

A. I wasn't in the mine on the day of the explosion until after the explosion.

Q. In what part of the mine were you on the day before the explosion?

A. I don't remember what part.

Q. How long were you in the mine on that day?

A. I don't remember; I believe I was down in the mine that day; I was down twice one of those days, a day or two before the explosion.

Q. How long were you in the mine if you know the day before the explosion?

A. I don't remember how long.

Q. How long were you in the mine on any day of the eight days before the explosion?

413 A. I don't remember the length of time that I was in any day.

Q. What part of the mine were you on any day out of the eight days next before the explosion?

A. Well, I remember in particular that the day before the explosion I was up in room 14 in the 3d left, which was making considerable water and we thought that there was some danger of breaking into the Green mine, that was the day before the explosion, and two or three days previous to the explosion I know that I was in at the face of the 4th left main entry and every day before the explosion I know that I was in the 6th and 7th left entry.

Q. How long were you in the 4th left at the face of the entry on the occasion that you were there a few days before the explosion?

A. I don't remember.

Q. When was the last time that you went through the 4th left air course before the explosion?

A. That I don't remember.

Q. Did you go through that 4th left air course within a month before the explosion?

A. I don't remember whether I did or not.

Q. You stated upon your redirect examination that if there was a current of air such as you had seen passing in that mine for eight days before the explosion, passing to the face of room 8, that that air would have been sufficient to carry out any gas which might accumulate there, didn't you?

A. I said yes, if the conditions of the room were alright.

414 Q. Well, if the air on Sunday night and Monday morning and Monday night was not carrying out the gas from the face of room 8, that shows that everything was not al- right, don't it?

A. It would be owing to what part of the room the gas was being generated from; if it was coming from the left-hand corner of the room it would take more air to move it from that point than it would if it was close to the canvas.

Q. Now, if the air on Sunday night and Monday morning and Monday night was not carrying out the gas from the face of room 8, that shows that everything was not al- right, don't it?

A. I don't know but what it was carrying out the gas except what little was being generated there as I understood it.

Q. Now, if the air on the Sunday night and Monday morning and Monday night was not carrying out the gas from the face of room 8, that shows that everything was not al- right, don't it?

A. Things may be al- right and not carry out all the gas.

Q. Then you were mistaken when you said that if the current of air, which you knew was going during eight days there, had been going to the face of room No. 8, that it would have carried out all the gas?

A. No, sir, I mean—what I mean is not during all that time You can go in there and catch a lamp full of gas and it is considered there is no gas in the room.

Q. Then when you say "All the gas" you don't mean all the gas, is that what I understand?

415 A. I mean that it is a very common thing that in a room there may be a little pot-hole, some point there which at any time you could catch a lamp of gas in, and at the same time it would not be considered that there was any standing gas in the room. That is what I mean.

Q. Now, would you consider a body of gas extending across the face of the room and 10 or 11 feet down from the face any gas?

A. Yes, sir.

Q. Well, if the air was not carrying out that body of gas on Sunday night and Monday morning and Monday night, or at any one of those times, it was not carrying out all the gas and everything was not al- right?

A. If such a body of gas was there, why it would not be al- right, there would not be sufficient air.

Q. And the fire-mark by the fire boss would not be all that would be required of him with reference to such a body of gas, would it?

A. In an abandoned place if he knew of any such body of gas standing there, that is always necessary, all that was necessary.

Q. Well, now suppose it was not an abandoned place and he did know that the gas was there?

A. If it was not an abandoned place he would not have allowed the men to go in there.

Q. Who would not have allowed men to go in there?

A. The fire boss.

416 Q. What did the fire boss have to do with men going in there?

A. It was his place to tell them not to go in there until the gas was removed.

Q. Well, the fire bosses's business was to notify the miners?

A. That is what I say; if it was not an abandoned place there would not have been men working there, he would have notified them not to go in there.

Q. Well, it was no part of the fire boss's business to notify company men about gas in the mine, was it?

A. The fire bosses did not at all times know where company men were going to work; that was the duty of the foreman.

Q. Now, Mr. Duggan, if the track had not been taken up in this room 8, was it an abandoned room?

A. Yes; that is what the term means; when a room is finished, it is a finished room.

Q. There is no difference between an abandoned place and an open place, is there?

A. Yes; there is some difference.

Q. Was room No. 8 an open place in that mine at the time of this explosion?

A. Well, it was a finished place and it was abandoned so far as taking out of coal was concerned.

Q. Was room No. 8 an abandoned place in that mine at the time of this explosion?

The COURT: Answer the question Mr. Duggan.

A. Yes; I think it was.

417 Q. Now, if the fire boss discovered a body of gas such as I have described to you, in an open place in that mine and did no more than to put a fire-mark on it, and did not go back to that fire-mark within 36 hours, did he or did he not do his duty as you understand it?

A. Well, so far as the safety of the men down there was concerned, he did his duty in putting those danger signals across the entrance of each place to the room.

Q. Did you understand that I was asking you anything about the safety of the men in that mine? Or that my question related to what you understood to be the duty of the fire boss?

A. No, I supposed it had reference to the safety of the men; that is what these signals are put there for.

Q. Now, without regard to what your opinion may be as to the safety of the men, my question is, if a fire boss found such a body of gas as I have described to you, and marked it with a fire-mark and left it for from 36 to 48 hours without going back to that fire-mark at all, did he or not do his duty as you understood his duty to be?

A. Well, he did it to some extent, but I don't think he did it fully.

Q. You testified upon your cross-examination that if he found such a body of gas as that, it was his duty to take it out, if he could, without assistance, and if he could not, to go and get assistance and take it out before he did anything else, did you not?

A. Yes.

418 Q. Well, now, do you stick to that still, do you still say so?

A. That is what he should do.

Q. Do you know of any rule or custom in that mine which permitted dangerous bodies of gas to accumulate in the open place of the mine and to remain there from 36 to 48 hours, protected only by a fire-mark?

A. No, sir.

Q. I believe you say that water in the 4th left air course did not practically interfere with the air circulation?

A. The quantity of water that I knew to be in there, I don't think interfered with the quantity of air that was needed in there at the face.

Q. Water and air won't go through the same channel at the same time will they?

A. Well, a little of it, probably.

Q. Enough to ventilate a mine?

A. No, sir, hardly.

Q. Now, if that water in the 4th left air course prior to this explosion reached a point within three inches of the roof on the low side and lay in the air course for a distance of from 2,000 to 3,000 feet, would such a body of water in your opinion practically interfere with the air circulation in that mine?

Mr. TWITCHELL: Objected to as improper recross-examination, and a hypothetical question based upon facts not in evidence in the case.

Objection overruled. Defendant excepts.

419 A. I don't think it would interfere much with the quantity of air going in there in that air course in proportion to the size of that area as compared with the quantity of air passing through the same area in the main slope?

Q. Now, if such a condition did exist prior to this explosion you, as superintendent of that mine, would say that it was al- right, is that what I understand?

A. I said that I do not think there was enough there to interfere according to the quantity of air that was going in there.

Q. This is a purely hypothetical question. Now, Mr. Duggan if the water in that 4th left air course prior to this explosion had reached a point within three inches of the roof on the low side, was that condition in your opinion as superintendent of that mine, alright?

A. It would be owing to the area that would be between the water and the roof. Still I will admit that it would be in better condition if there was no water at all in there and more air would pass through that air course.

Q. Now, if there had been any such condition prior to this explosion and you had known about it, what would you have done about it?

A. I would have had it taken out if it was anything except a small quantity.

Q. I am asking you now what you would have done if you had known of a body of water reaching to within three inches of the roof on the low side and lying for from 2,000 to 3,000 feet in the air course.

420 Mr. TWITCHELL: Objected to on the ground that it is a hypothetical question based upon no evidence in the case, and further for the reason that this question has been asked about five times, and the witness has answered the question every time.

A. I would have had some of it taken out.

Q. How much?

A. I don't know just how much; I could not tell as to that without being right there to see.

Q. Every book that you have ever read as to the ventilation of mines lays down the proposition that any obstruction in the air course diminishes the supply of air, does it not?

Mr. TWITCHELL: I object to any information he may have derived from books with reference to the circulation of air in air courses as certainly improper cross-examination.

Objection overruled. Defendant excepts.

A. Yes, sir.

Q. Did your instructions to Donohue at the time you employed him as foreman of that mine contemplate that he might permit the

syphon pipe in the 4th left air course to lie idle for a period of as much as a month at a time?

Mr. TWITCHELL: Objected to as improper recross-examination. It is also a hypothetical question based upon a fact not in evidence.

Objection overruled. Defendant excepts.

421 A. I don't remember of saying anything to Mr. Donohue about the syphon except to keep the mine free from water. That's all.

Mr. FIELD: I move to strike out the testimony of this witness as to the production of the mine, because the record of the production has not been offered to us to cross-examine him upon; because it appears from the evidence that the record of that production was kept by the defendant company; that the witness has no personal knowledge on the subject but is attempting to testify upon the record and the record is the best evidence, and the record is not produced here, but an impression copy book is attempted to be produced as the record.

By Mr. TWITCHELL:

Q. Examine this page 275, Mr. Duggan, and tell me what it is.

A. This is a report of the number of days that the White Ash mine worked in the month of December, 1894.

Q. Who is it signed by?

A. It is signed by me.

Q. Who wrote your signature, yourself or your clerk?

A. The clerk.

Q. Were you in control of that book at the time that letter or this copy of that letter was written?

A. Yes, sir.

Q. Where is the original letter?

A. The originals are in Topeka, Kansas.

By Mr. FIELD:

Q. In the possession of the defendant company?

422 A. I presume so.

By Mr. TWITCHELL:

Q. To whom is that letter addressed?

A. At this time it was sent to Mr. Devlin.

Q. Is Mr. Devlin in the employ of the Atchison, Topeka and Santa Fé Railroad Co., or the Cerrillos Coal Railroad Co.?

A. No, sir. We have the original reports down at the hotel about the total production.

Mr. FIELD: We make the further objection that this is not the original record and does not purport to be an original record; that it is an attempt on the part of the defendant company to manufacture evidence for itself and that as to this witness it is the purest hearsay.

By Mr. TWITCHELL:

Q. Do you know when that was made, Mr. Duggan? State whether or not that impression there was made before or after the White Ash explosion.

A. That was made before the explosion.

By Mr. FIELD:

Q. Did you make it?

A. No, sir.

Q. Did you see it made?

A. I either saw it made or saw it at the time it was made; the day or the day after I always saw these reports before they are sent in.

Q. Who made it?

A. Made by Mr. Smith, the clerk.

Q. Where is Mr. Smith?

A. He is at Madrid.

Mr. FIELD: I renew the objection on the additional ground
423 that there is better evidence in possession of the defendant company and within its reach.

By Mr. FIELD:

Q. You stated that you had at the hotel daily reports of the production during this period, the original?

A. Yes, sir.

Mr. TWITCHELL: I propose to have him use these as a memorandum to testify from.

By Mr. TWITCHELL:

Q. Were you at the White Ash coal mine during the month of December in charge of the work there?

A. Yes, sir.

Q. Now, what days were they working in the mine, do you know?

A. Yes, sir.

Q. And the same with reference to the month of January?

A. Yes, sir.

Q. And the same with reference to the month of February?

A. Yes, sir.

By Mr. FIELD:

Q. Did this mine work on the 1st day of January, 1895?

A. No, I don't think it did.

Q. Did it work on the 2d?

A. I don't remember the days from memory, that is, each and every day the mine worked.

Q. You know nothing whatever about it except the information you got from that book, do you?

A. It is not supposed that any man could remember such a thing.

424 Mr. FIELD: I renew the motion to strike out the testimony upon the same ground.

The COURT: I will permit these books to go in.

Mr. FIELD: They haven't been offered yet. I have asked your honor to strike out his testimony that is hearsay, and that he has no knowledge on the subject.

The COURT: I will sustain the motion unless these letter-press books are offered.

By Mr. TWITCHELL:

Q. Find out, if you can, the number of days that that mine worked during the month of December, 1894.

A. Eighteen and a third days worked in December, 1894.

Mr. CLANCY: We object to his reading.

Mr. TWITCHELL: I will offer page 275 of the book marked on the outside, "Statements," and on the back, "Vouchers, A. T. & S. F. R. R. Co."

Mr. FIELD: To which the plaintiffs object- because it appears from the book as presented and upon the testimony of the witness that it is not an original record, was not made by the witness, and that the original records, of which this is a summary, are in the possession of the defendant company and of the witness and that they are in the town of Santa Fé.

Objection overruled. Plaintiffs except-.

Q. I will ask the witness to read that entry, page 275, now.

(What the witness read is as follows:)

425 Cerrillos Coal Railroad Company.

Superintendent's office.

Copy.

MADRID, N. M., *January* 31, 1895.

Mine No. 1 B.

Report of Time Worked and Time Lost During the Month of January, 1895.

Jan'y	1.	Idle holiday.	
"	2.	Worked full day.	
"	3.	Lost 5 hours, cleaning up right side.	
"	4.	Lost 5 hours, cleaning up right side.	
"	5.	Worked full day.	
"	7.	"	
"	8.	"	
"	9.	"	
"	10.	"	
"	11.	"	
"	12.	"	
"	14.	"	
"	15.	"	
"	16.	"	
Jan'y	17.	Worked full day.	
"	18.	"	
"	19.	Idle full day (pay day).	
"	21.	Worked full day.	
"	22.	"	
"	23.	"	
"	24.	"	
"	25.	"	
"	26.	Idle full day (no orders).	
"	28.	Worked full day.	
"	29.	"	
"	30.	"	
"	31.	"	

Time worked	23 days.
" lost	4 "
Total	27 days.

JAMES DUGGAN, *Supt.*

426 By Mr. TWITCHELL:

Q. Now examine that book and ascertain the time report for the White Ash mine during the month of January, 1895.

A. I have found it.

Q. What page is it?

A. Page 294.

Mr. TWITCHELL: I offer page 294 of this book, being a statement of the time of the White Ash mine for the month of January, 1895.

Mr. FIELD: Same objection as made to page 275.

The COURT: I understand that the objection offered with respect to the January and February time is the same as with respect to December, 1894, as to his knowledge.

Mr. TWITCHELL: It is the same.

The COURT: Objection overruled.

Plaintiff excepts.

Mr. FIELD: I object to the page upon the additional ground that the report for the month of January is dated January 5.

Objection overruled. Plaintiff excepts.

Page admitted in evidence.

Page 294 is as folllows:

427 Cerrillos Coal Railroad Company.

Superintendent's office.

Copy.

MADRID, N. M., *December* 31, 1894.

Mine No. 1 B.

Report of Time Worked and Time Lost During the Month of December, 1894.

Dec. 1. Idle no cars.	Dec. 17. Idle, no cars and pay day.
" 3. Worked full day.	" 18. Worked full day.
" 4. "	" 19. "
" 5. "	" 20. "
" 6. Idle no cars.	" 21. "
" 7. Worked full day.	" 22. "
" 8. "	" 24. "
" 10. "	" 25. Christmas, idle.
" 11. "	" 26. Worked full day.
" 12. Lost 3 hrs., no cars.	" 27. "
" 13. Idle no cars.	" 28. "
" 14. Lost 2 hrs., no cars.	" 29. "
" 15. Idle no cars.	" 31. Idle no orders.

Total time worked.....	18 days, 5 hrs.
" lost.....	7 " 5 "
Total.....	26 days.

JAMES DUGGAN, *Supt.*

428 By Mr. TWITCHELL:

Q. I will ask you to find the same character of report for the month of February, 1895?

A. I have it, page 310.

Mr. TWITCHELL: I offer page 310 of the same book in evidence.

Mr. FIELD: We make the same objection as to page 275.

Objection overruled and page 310 referred to is admitted in evidence. Plaintiff excepts.

Said page 310 as read to the jury, is as follows:

429 Cerrillos Coal Railroad Company.

Superintendent's office.

Copy.

MADRID, N. M., *February* 28, 1895.

Mine No. 1 B.

Report of Time Worked and Time Lost During the Month of February, 1895.

Feb'y	1. Lost 5 hrs. no orders.	Feb'y	16. Worked full day
"	2. Lost full day "	"	17. " Sunday.
"	4. Lost 5 hrs. "	"	18. "
"	5. Worked full day.	"	19. "
"	6. "	"	20. "
"	7. "	"	21. "
"	8. "	"	22. "
"	9. Lost ½ day, no o'd'rs.	"	23. "
"	11. " ½ " "	"	25. "
"	12. Worked full day.	"	26. "
"	13. "	"	27. Lost ½ day, explos'n.
"	14. "	"	28 Lost full day.
"	15. "		

Total time worked	20 days, 5 hrs.
" lost	4 " 5 "
Total	25 days.

JAMES DUGGAN, *Supt.*

430 By Mr. FIELD:

Q. Do you know from which side of the mine the majority of the coal produced in the month of January came?

Mr. TWITCHELL: Objected to as improper recross-examination, and for the further reason that the only testimony brought out by the reports just read by the witness are as to the time worked and not as to the coal produced, the number of days worked.

Objection overruled. Defendant excepts.

A. Yes.

Q. Which side?

A. The left side.

Q. Do you know from which side of the mine the coal produced in the month of February came, the majority of it?

A. Yes, sir.

Q. Which side?

A. The left side.

Q. Do you know how many men were working in the month of January on the left side of the mine?

A. I don't remember just now.

Q. Do you know how many were working there in the month of February?

A. My remembrance is that there was about 120 or 125 men.

Q. Were there more or less than that in the month of January?

A. I think there was very little difference.

Q. You have in your possession and here in Santa Fé,
431 haven't you, daily reports showing the production of that mine, just how much each place produced?

A. No, sir; there is no reports that shows the place where any men work in the mine.

Q. I mean which entry?

A. There is never any record to show where they work on the coal reports, books or any reports we have. We simply know what is the amount of coal every man gets out each shift. It has no regard to where that man works.

Q. You have reports showing how much coal each man got up during each shift?

A. Yes, sir.

Witness excused.

L. T. KINNEY, being called and sworn as a witness for the defense testifies as follows:

By Mr. TWITCHELL:

Q. What is your name, age and occupation?

A. T. L. Kinney, 25 years old, reside in Madrid.

Q. What is your business?

A. Time-keeper.

Q. Where?

A. At Madrid.

Q. In what mine or for what company?

A. For the Cerrillos Coal Railroad Company for all mines, White Ash mine.

Q. What position did you occupy during the months of December, January and February, 1895?

A. Time-keeper.

Q. Did you know Henri Deserant, Sr.?
432 A. I did.

Q. Did you know Henri Deserant, Jr.?

A. I did.

Q. Did you Jules Deserant?

A. Yes, sir.

Q. State what your position of time-keeper was, what was your business as time-keeper?

A. My duties required me to keep time of all men working, coal produced, make pay-roll.

Q. Do you know when Henri Deserant went to work for the Cerrillos Coal Railroad Co.?

A. March, 1894, I believe.

Q. Can you tell the jury how much money Henri Deserant, that is Henri Deserant, Sr., earned during the first month that he worked for the Cerrillos Coal Railroad Company. If you have a memorandum from the book made out by yourself as to the wages earned by Henri Deserant during the time he worked in the White Ash mine, you may so state?

A. Yes, sir.

Q. Produce the memorandum?

Memorandum produced.

Q. You kept the time books?

A. Yes, sir.

Q. Made out the pay-rolls?

A. Yes, sir.

Q. Kept all the time books, made up all the pay-rolls, all entries and everything?

A. Yes, sir.

Mr. TWITCHELL: What are these books lying on the table?

433 A. These are the Cerrillos Coal Railroad Company's monthly time books.

Q. Who kept these books?

A. Myself.

Q. I will ask you, if from an examination of these books, you can tell when Henri Deserant went to work in the White Ash coal mine, how long he worked, and how much he was paid from the time he went to work until his death in the White Ash mine?

Mr. CLANCY: Object to that question, or any evidence of the kind from this witness until it is shown how he kept those books, what his sources of information were and whether he knew anything of the facts that he recorded there.

Q. Do you know how long this man worked in the mine, Mr. Kinney?

A. Henri Deserant, Sr., worked, I believe five months, he was idle——

Q. Do you know when you made these entries in the book? Did you make these books from facts of your own knowledge, how long they were working and all about it?

A. Yes, sir.

By Mr. CLANCY:

Q. Do you mean to tell us that all of the men whose time you kept down there, you knew of their being at work and saw them going to and coming from their work, every man, that that was part of your business in all of the mines there are at Madrid?

A. No. Not to see that they do go to work, no, sir; I

434 don't see every man that goes to work but if they come in at night I can tell them whether they have been at work or not.

Q. How did you get at the fact- which you say are in these books, how did you learn them?

A. When the coal is hoisted from the mine it is taken to the

weigh office and weighed, sent into the office and put on these time books by myself.

Q. Well, then this time of which you speak is only the result of what is done at the weigh office?

A. Yes, sir.

Q. Then you don't know at the time you made the record that the man had been at work at all except as the record of the weigh office would show that they had sent up coal?

A. That is all.

By Mr. TWITCHELL:

Q. Each man working in the mine ran on a regular checked number, did he not?

A. Yes, each man has a check.

Q. Did you know the check numbers of the Deserants?

A. Yes.

Q. Did you know the check number of every man in the mine?

A. I suppose I did at the time.

Q. And these time books were the books from which every man was paid his month wages, were they not?

A. Yes, sir.

A. And these books or checks, I mean were accepted by
435 these men in payment for the work performed by them in the mine according to the time kept by yourself?

A. Yes, sir.

By Mr. CLANCY:

Q. Were they paid according to the time that they were worked or were they paid according to the amount of coal that they produced?

A. They were paid according to the amount of coal that they produced.

Q. Then the record as to these men would properly show only the amount of coal that they produced?

A. These records show the work of all kinds of work done by the men, hours' work.

Q. That is, the hours of time of work that would be shown for company men. You would not keep a record of that kind for coal miners who are paid by the ton, would you?

A. When they are working by the ton, I would not.

Q. There would not be any reason for it, would there?

A. No, sir.

By Mr. TWITCHELL:

Q. Don't these books show the number of tons mined by the people?

A. Yes, sir.

Q. These books were kept by yourself?

A. Yes, sir.

Q. From information sent you from the scales, from the weigh-master?

A. Yes, sir.

436 Q. And there are no entries in these books except those that you made yourself?

A. No, sir.

By Mr. CLANCY:

Q. How did that information reach you from the weigh office?

A. The coal is weighed when it comes out of the mine and they send in the weights of each check number. It is put on a sheet, duplicate numbers were made in the time books and then they are copied on to the coal books.

Q. Now, did they make at the weigh office and send to you a sheet like that as each trip came up or did they make up a sheet for you for the shift or a day and send it to you?

A. They make their sheets up at the end of every day.

Q. Do you know if it was their custom as each car was weighed to make an entry on that sheet and make them through the whole day in that way?

A. They make an entry for each car that comes up.

Q. On the sheet for the day, as it comes up?

A. Yes, sir.

By Mr. TWITCHELL:

Q. Examine these books, Mr. Kinney, and state how much Henri Deserant, Sr., made during the first month that he worked for the Cerrillos Coal Railroad Company?

Mr. FIELD: If you have a memorandum with you made from examining these books, you may speak from the memorandum?

By Mr. CLANCY:

Q. Can you tell the number of days that each of them worked?

437 A. I can tell you the number of days that coal was loaded into the railroad cars.

Q. The number of days that the mine worked?

A. Not exactly; sometimes there is coal standing over that they dumped into the railroad cars.

Q. Not the number of days then?

A. No, sir.

By Mr. TWITCHELL:

Q. Tell the jury how much Mr. Deserant, Sr., made.

A. In April, 1894, he made $58.10.

Q. Did you keep the deduction against his wages at that time?

A. Yes, sir.

Q. How much were the deductions, and what were they; what were they for?

Mr. FIELD: Objected to as irrelevant and immaterial, that is, to show his earning capacity during the entire time that he worked in the mine.

Objection overruled. Plaintiff excepts.

Mr. FIELD: The objections goes both to the deduction and the capacity of this witness to testify as to them.

Q. I will ask you whether or not in your capacity as time-keeper you sold coupons to the miners working in that mine.

A. I did.

Q. I will ask you whether these deductions represent sales of coupons or not?

A. Yes.

Q. And other charges, physicians' charges and rents, things of that kind?

438 A. Yes, sir.

Q. Well, how much were the deductions for the month of April, 1894; what did these coupons represent, Mr. Kinney?

A. They represented cash in the store, I suppose.

Q. Good for merchandise?

A. Yes, sir.

Q. Did these coupons specify a certain amount of cash which could be used as such at the company's store?

A. A coupon can be used for no other purpose except for merchandise.

Q. Merchandise where?

A. At the store.

Q. Outside of coupons were there any other deductions made?

A. Yes, sir.

Q. What were they?

A. The- were doctor, rent, blacksmithing, powder, that's all, I believe.

Q. Well, how much were these deductions for the month of April to the account of Henri Deserant, Sr.?

A. $27.

Q. And how much was the balance paid him as his net wages for April, 1894?

Mr. FIELD: I object to the proposition that it was net wages; it was all net wages. How much was the balance he got from this company we don't object to.

Objection sustained. Defendant excepts.

439 Q. What was the balance in cash paid Henri Deserant, Sr., for the month of April 1, 1894?

A. $31.10.

Q. Now answer the same questions that I have propounded with reference to the month of May, 1894, as to the amount of money earned, the amount of deduction and the amount of cash paid him?

A. His earnings were $50.12, his deductions were $32, and the balance paid him $18.12.

Q. Did Henri Deserant, Sr., work in the mine during the month of June, 1894, if you know?

A. He did not.

Q. Do you know why not?

A. I could not tell you why he did not work the first two days. The strike began on the 4th day of June.

Q. How long did that strike continue?

Mr. FIELD: Objected to as irrelevant, incompetent and immaterial.

The COURT: Sustained on the ground that it is immaterial.

Q. Did he work in July, 1894?

A. He did not.

Q. Was the mine at work in the month of August, 1894?

A. Yes, sir.

Q. Did Henri Deserant, Sr., work at that time?

A. No, sir.

Q. In the month of September was Henri Deserant, Sr., at work in the White Ash mine?

A. No, sir.

440 Q. When did he next go to work in the White Ash mine?

A. About December 11.

Q. What was the amount of money earned by him during the month of December, 1894?

A. $45.91.

Q. What were the deductions for the month?

A. $15.25.

Q. What was the amount of cash paid him?

A. $30.66.

Q. Did he or did he not work in the White Ash mine during the month of January, 1895?

A. He worked in January, 1895.

Q. How much was the amount of money earned by him during that month?

A. $51.66, deductions $38, cash balance paid him $13.66.

Q. Did he work there during the month of February?

A. Yes.

Q. How much was the amount he earned during the month of February?

A. $68.60.

Q. How much were the deductions?

A. $37.50

Q. How much cash was paid him for the balance?

A. $31.10.

Q. From the time that Henri Deserant, Sr., went to work in the White Ash mine up to the time of the explosion, state how much money was earned by him?

A. $274.39.

441 Q. And how much were the deductions?

A. $149.75.

Q. And how much cash was he paid?

A. $124.64.

Q. Did you know Henri Deserant, Jr.?

A. Yes, sir.

Q. When did he go to work in the White Ash mine, if at all?

A. He went to work the 1st day of June.
Q. How much did he earn during the month of June?
A. $5.88.
Q. How much were the deductions?
A. $5.88.
Q. How much was he paid in cash?
A. Nothing.
Q. When was the next time he performed any work in the mine?
A. In August.
Q. How much did he earn in August?
A. $39.18.
Q. How much were the deductions?
A. $10.87.
Q. And the amount of cash paid him?
A. $28.31.
Q. What was the next month he went to work in that mine?
A. September.
Q. What were his earnings in September?
A. $22.33.
Q. What were his deductions?
A. $4.25.
Q. And the amount of cash?
442 A. $18.08.
Q. How much did he earn in October?
A. $42.74.
Q. How much was the deduction?
A. $42.74.
Q. Cash paid him that month?
A. Nothing.
Q. November?
A. His earnings were $35.35, deductions $20.50, cash paid him $14.85.
Q. December, 1894?
A. $54.68, deductions $12.75, cash paid him $41.93.
Q. Month of January, 1895?
A. $44.38, deductions $13, cash $31.38.
Q. Month of February?
A. $84.82, deductions $25.75, cash $59.07.
Q. What was the total amount of money earned then by Henri Deserant, Jr., from the time he went to work in the White Ash mine until the 27th of February, 1895?
A. $329.36.
Q. And the amount of deductions?
A. $135.74.
Q. And the amount of cash paid him?
A. $193.62.
Q. Did Jules Deserant ever run any check in the White Ash mine?
A. Yes, sir.
Q. When was it?

A. September, 1894.

Q. What was the amount of money he earned in September?

443 A. $15.50.

Q. What were the deductions?

A. Deductions $11, and cash paid him $4.50.

Q. What was the occupation which he had in the White Ash mine in the month of September, 1894, if you know?

A. I could not say for sure, I believe he was trapping. I can tell by referring to the records.

Q. I will ask you whether or not Jules Deserant from the month of September, 1894, ever ran a check number in the White Ash mine as a miner?

A. He did not.

Q. I will ask you whether or not you know of your knowledge whether he worked with his father and brother in the White Ash mine?

A. I never seen him work there, I suppose he did.

Q. Did he ever receive any time check or pay check from the month of September, 1894, up to the time that he was killed in the explosion?

A. No, sir.

Cross-examination.

By Mr. CLANCY:

Q. Mr. Kinney, are you able to tell from your records the number of days that any of these men worked in any month?

A. Yes, sir.

Mr. TWITCHELL: Objected to as improper cross-examination, in the first place.

Objection overruled. Defendant excepts.

Q. Can you tell how many days Henri Deserant, Sr., in the month of April, 1894, worked?

444 A. Yes, sir.

Q. Is this a book that you kept, too?

A. Yes, that is the mine book, 17 days.

Q. Now, can you tell us how many days he worked in the month of May, 1894, the next month?

A. 13 days.

Q. I think you said the next month in which he worked was December. Will you turn to that month and see how many days he worked, in December, 1894?

A. 12 days.

Q. Now, refer to the month of January, 1895, and tell us how many days he worked?

A. 16 days.

Q. And in the month of February, 1895, how many days did he work?

A. 20 and ½ days.

Q. Now, as to Henri, the younger, refer to the month of June, 1894,

when you say he began work, and state how many days he worked in that month.

A. Two days.

Q. In the month of August, when you say he next worked, how many days did he work?

A. 14 days.

Q. In the month of September how many days did he work; September, 1894?

A. September? 8 days.

Q. In October, how many days did he work?

A. October? 14 days.

Q. In the month of November, how many days did he work?

A. 13.

445 Q. And in the month of December?

A. 17 days.

Q. And in the month of January, 1895, how many days?

A. January 10 days.

Q. In the month of February, how many days?

A. 20½.

Q. Now, Mr. Kinney, does it not appear from the figures which you have given that Henri Deserant, Sr., worked 78½ days and during that time earned $274.39?

Mr. TWITCHELL: Objected to. The amount of money which this intestate earned during that time is before the jury and the number of days in which he earned it is before the jury, and any deduction as to the *per diem* wage are for this jury to draw and not for this witness. Objected to as improper cross-examination.

Objection overruled. Defendant excepts.

A. The earnings are correct. I didn't keep any account of those days.

Q. After you have now made the computation, answer the question.

A. Yes; those figures are correct.

Q. From those figures how much does it appear that Mr. Deserant earned per day for the days that he worked?

Mr. TWITCHELL: Objected to on the further ground that the computation is made upon a calculation not taken into consideration, the fact that the plaintiff's intestate, Jules Deserant, worked

446 a portion of the time along with his brother and father, and during which labor these amounts were earned.

Objection overruled. Defendant excepts.

A. $3.49½.

Q. Now, does it not also appear from the figures which you have given that Henri Deserant, Jr., worked a total of 97½ days and during that time earned $329.36?

A. Yes, sir.

Q. Now, on the basis of those figures how much per day does he appear to have earned for the days that he worked?

A. $3.38.

Redirect examination.

By Mr. TWITCHELL:

Q. You say Henri Deserant, Sr., worked 78.5 days?
A. Yes, sir.
Q. And you have already testified as to what the deductions were against his account during those days. Please figure out the amount of deduction per day charged to the account of Henri Deserant, Sr.? Figure out the same thing for the other Deserant, how much do you make it?
A. $1.90 for Henri, Sr., $1.31 for Henri, Jr.
Q. Figure that again and see if it is not $1.40.

Court adjourned till 9 a. m. tomorrow.

Court met pursuant to adjournment.

Q. What did you find out, Mr. Kinney, with reference to
447 the daily reduction for Henri Deserant, Jr.?
A. I figure $1.39 and a fraction less than a half.
Q. Mr. Kinney, can you tell me how many miners were working in the White Ash mine during the month of December, 1894?

Mr. FIELD: Objected to as not proper redirect examination.
Mr. TWITCHELL: They went into the value per day and I want to show the average of number of days work, and the number of men and the total number of days worked by the total number of men, showing in that way the number of days per man in the mine.
Mr. CLANCY: Objected to on the ground that that which other men earned throws no light on the matter brought out in the cross-examination of this witness.
Mr. TWITCHELL: I will ask the court's permission to make this proof on the ground that I neglected to do it on the direct examination.
The COURT: I am unable to see how the number of days worked performed by other men in the mine would in any way be material as to estimating the value of the deceased; if they worked a less number of days than other men engaged in the mine, why it seems to me it won't help the defendant any at all.

Mr. FIELD: We haven't objected to his showing the num-
448 ber of days that the White Ash mine worked during these months and that is before the jury.

The COURT: Objection sustained, on the ground of immateriality.
Mr. TWITCHELL: The defendant offers to prove by the witness the total number of days worked during the month of December, 1894, the total number of days worked during the months of January and February, 1895, by the miners, in the White Ash mine.
Mr. FIELD: As to that offer the plaintiff objects because the proof is already before the jury without objection.
Mr. TWITCHELL: The defendant further offers to prove by the witness the number of men engaged in mining coal, working in the

White Ash mine during the month of December, 1894, and during the month of January and February, 1895.

Mr. FIELD: To which we make no objection.

The COURT: You can ask those questions; there is no objections.

Q. How many men were working in the White Ash mine during the month of December, 1894?

A. 2,470.

Q. The number of men?

A. 130.

Q. How many men engaged in mining coal as miners were working in the White Ash mine during the month of January, 1895?

A. Averaged, 96⅞.

Mr. FIELD: We object to any average; he is not asked about any average.

449 Q. Do you know the number of men that were working in the White Ash mine during the month of January, 1895, engaged in mining coal, the total number?

A. I don't know the actual number of men.

Mr. TWITCHELL: I thought I could prove the total number of men working in this mine by this witness and I withdraw all the testimony of this witness and the record made as to this witness this morning.

Witness excused.

Defense rests.

Rebuttal.

JOSEPHINE DESERANT recalled as a witness in rebuttal.

By Mr. FIELD:

Q. State to the jury, Mrs. Deserant, whether or not your husband and sons brought to you the coupons received by them from the defendant company and whether or not these coupons were by you used at the company store for the purpose of buying supplies for the support of yourself and the members of your family.

Mr. TWITCHELL: I object to the question, on the ground that it is immaterial as to what was done by the intestates with the coupons.

Objection overruled.

Mr. TWITCHELL: The question is objected to for the reason that it is not material as to the measure of damages in this case, which is the value of the life of plaintiff's intestate to the estate,

450 and testimony with reference to the giving to her of a portion of his earnings during his lifetime cuts no figure in this case.

Objection overruled. Defendant excepts.

A. Yes, sir.

Cross-examination.

By Mr. TWITCHELL:

Q. Did they give you these coupons every month?
A. Yes, sir.
Q. Both your husband and your son's?
A. Yes, sir.
Q. Every coupon each month that they got out of the store they brought to you, did they?
A. Yes, sir.
Q. And the coupon which your son Jules got he brought to you, too, did he?
A. Yes, sir.
Q. And you used these coupons in the purchase of supplies for the family, did you?
A. Yes, sir.
Q. And for no other purpose?
A. Yes, sir; for that purpose.

Witness excused.

JAMES MERCHANT recalled in rebuttal.

By Mr. FIELD:

Q. You have testified heretofore in this case?
A. Yes, sir.
Q. And have stated that you met Mr. Duggan down in the White Ash mine after the explosion?

451 A. Yes, sir.

Q. State whether or not you ever said to Mr. Duggan at any time when you were down in that mine after the explosion, as described by you, that you thought a lot of water from the old Green workings had run in and filled up the 4th left air course or not, or words of like import or effect.

Mr. TWITCHELL: I object to the form of the question.
Objection overruled. Defendant excepts.

A. No, sir, I don't remember of ever speaking about the old mines to Mr. Duggan; not that I can remember about, at all.

Witness excused.

CHARLES KELLY called and sworn as a witness for the plaintiff in rebuttal.

By Mr. FIELD:

Q. What is your name?
A. Charles Kelly.
Q. Where do you live?
A. At Cerrillos.
Q. Are you related to Alexjandro Kelly who was killed in the White Ash mine in February, 1895?
A. Yes, sir.

Q. State whether or not you went into that mine after the explosion for the purpose of finding your brother's body.

A. Yes, sir.

Q. Did you find him?

A. Yes, sir.

Q. Where was it?

452 A. In the back entry of the 4th left.

Q. Where?

A. In the back, close to the cross-cut.

Q. What do you mean by the back entry?

A. That is the name of the place as I always understood the word.

Q. Describe to the jury just where you found your brother's body.

A. I don't know the number of the place where he was, but the place he was I understood them to call it the back entry. I don't know a thing about in the mine, but that is the name of the place where we found him, as I understood it.

Q. Had you ever worked in the mine?

A. No, sir.

Q. Now, state how many bodies were found by you in the place where you found your brother's body?

Mr. TWITCHELL: Objected to unless it is disclosed by counsel what the intent is, the purpose of the testimony.

Mr. FIELD: The purpose of the testimony is to show that there were three bodies in the rooms where Kelly's body was found, and that they were the bodies of Kelly, Donohue and Flick.

The COURT: Answer the question.

Defendant excepts.

A. There was three bodies.

Q. Whose bodies were they?

A. Donohue's, Kelly's and another man. I don't know the man's name; Flick is his name.

453 Q. Describe to the jury the relative position of the bodies of your brother, Donohue, and the other one whose name you don't know.

A. My brother had his neck broken.

Q. No, their relative position; how they lay in this place where they were found.

A. I could not exactly tell you how they were laying; I was in a hurry to find my brother and didn't pay any attention to how they were laying; I was in a hurry to get my brother out of the mine.

Q. Which was the first of these bodies you found of these three?

A. The first I found was the stranger's.

Q. And the next one was who?

A. My brother.

Q. And the next one?

A. Donohue.

Q. How far was the body of the stranger, as you call him, from the body of Donohue?

A. He must have been from 5 to 10 feet apart, I could not exactly tell you.

Q. How far was the body of Donohue from the body of your brother?

A. He was about five feet.

Cross-examination.

By Mr. TWITCHELL:

Q. What time did you go into the White Ash mine after the explosion?

A. About a quarter after six or seven.

Q. On what day?

A. Thursday.

454 Q. What day of the month?

A. The 27th.

Q. You went in on the day of the explosion, did you?

A. Yes, sir.

Q. Who went with you?

A. There was four other men, I don't know the men.

Q. And you don't remember the names of any of the men that went with you?

A. No, sir.

Q. Did you ever meet them before?

A. Before, I don't think I ever did.

Q. Have you ever seen them since?

A. I never paid any attention; I moved away from the White Ash mine to Cerrillos and never paid any attention afterwards for them.

Q. Whose body did you bring out first?

A. I didn't bring but my brother's body out, I didn't help bring the others out.

Q. Then of your own knowledge you don't know where they found this stranger's body, do you?

A. I told you once about five or ten feet from where my brother's body was.

Q. In which direction?

A. Right back from where he was.

Q. Towards the face of the room?

A. No, sir, not towards the face of the room.

Q. Was it towards the neck of the room?

A. Yes, sir.

Q. And were you present when they found Donohue's body?

455 A. I was right there, yes, sir.

Q. Did you recognize his face?

A. His face was pretty black.

Q. But you recognized him?

A. I knowed him.

Q. Did you know him when you found him in the mine?

A. I knowed him when we found him in the mine.

Q. Which way did you get into room 8 when you found these bodies?

A. Went through the 4th left.

Q. How did you get into room 8 from the 4th left?

A. Well, the men led me in that was with me, I don't know the number of the places, but I was right with them helping them to hunt my brother out in there.

Q. Well, your brother's body was taken out before Donohue's wasn't it?

A. I think they were both taken out the same time.

Q. You are positively certain of that, too, ain't you?

A. I am certain that they took them both out.

Q. At the same time?

A. They both didn't go out in the same car, they put them both in different cars.

Q. But they took them down to the slope at the same time?

A. Took one out first and then the other one.

Q. Took your brother's first, didn't they?

456 A. Yes, sir.

Q. You are as certain about that as you are about everything else you have testified to?

A. I am certain they took my brother's body out before his.

Q. Did you go back to room 8 when you took out Flick's body?

A. I didn't take out Flick's body.

Q. Did you ever go back to room 8 after your brother's body was taken out?

A. No, sir, after my brother's body was taken out I didn't go back.

Q. When you went in there whose body was found first, your brother's or Flick's?

A. Flick's.

Q. Did you go in any other room except room 8?

A. I think not.

Q. How did you know there were any bodies in room 8?

A. I didn't know when I went down. The men led me into room 8; they had taken out a good many bodies, and they led me in there and we found him in there.

Q. Is it not a fact that your brother's body and Flick's were the last ones taken out of the mine after the explosion?

A. I think not.

Q. Did you examine the condition of Donohue's body?

A. No, sir, I didn't examine him.

Q. Never saw his body when it was brought down to the slope?

457 A. I didn't pay any attention if they brought him out at once. When I got my brother's body out I went on and didn't come back any more to the mine.

Q. Had you made any efforts to go up into that entry prior to the time that your brother's body was taken out?

A. By myself?

Q. Or with anybody else?
A. No, sir, before they had taken them out, no, sir.
Q. Were you at the White Ash mine during the evening following the explosion?
A. I was there but I didn't go in; it was late in the evening.
Q. And you saw all the bodies that were brought out as they were brought out during the afternoon?
A. I seen about all.
Q. And you are willing to swear here point blank and absolutely that Mr. Donohue's body was found 5 or 6 feet from your brother's?
A. Yes, sir.
Q. Can't you tell me the name of some one man that was in there with you?
A. No, sir, I did not know them.
Q. Do you know Mr. James Merchant?
A. No, sir.
Q. Do you know Mr. John Deighton?
A. No, sir, I do not.
Q. Do you know Mr. Duggan, the superintendent?
A. I know him, yes.
458 Q. Can you tell me the name of a single miner that went in there with you or that you saw on the slope or anywhere while you were in there while your brother was being brought out?
A. I had only been there a few days when the explosion occurred and was a stranger; you might say just there two or three weeks.
Q. When you went into room 8 did you have a lamp?
A. No, sir, it was the other men's lamp I was going by.
Q. Were you behind the other men or front of them?
A. I was right in among them.
Q. Did you recognize your brother's body the first time you saw it when you got into room 8?
A. Yes, sir, I did.
Q. Well, when you found your brother's body was — immediately taken out of the room?
A. Didn't take him out all at once, it must have been five or ten minutes before they took him out.
Q. Did you stay in that room all the time that they were trying to get your brother's body out?
A. As soon as we found him I stayed right with him until we got him out.
Q. They did not take Flick's body out of the room first although they found that first, is that so?
A. Took Flick's body out first, you say?
Q. Didn't they take his body out first?
A. I suppose they did.
Q. Did they or did they not take Mr. Flick's body out first?
459 A. They did.
Q. Did you stay in that room while they were taking his body down to the entry?
A. Yes, sir.

Q. Stayed there all by yourself?
A. I stayed right there.
Q. And waited for them to come back and then went up and found your brother's body, is that so?
A. We found the three bodies, you might say, at once.

Redirect examination.

By Mr. FIELD:

Q. What time of the night was it when you got your brother's body out of the mine, if you remember?
A. Between half past 8 and 9 o'clock.

Mr. FIELD: That is the case of the plaintiff.

Surrebuttal.

Mr. JAMES DUGGAN recalled for rebuttal.

By Mr. TWITCHELL:

Q. I believe you stated in your testimony the other day, Mr. Duggan, that you were down in the White Ash mine subsequent to the explosion and when the bodies were brought out?
A. Yes, sir.
Q. Did you know John Donohue?
A. Yes, sir.
Q. What time of the afternoon was his body brought out?
A. About four o'clock in the afternoon.
460 Q. Did you recognize the body of John Donohue when it was taken out?
A. Not except by his clothing and the cast of his features.
Q. I will ask you to describe the condition of his face and his head when he was found and brought out?
A. The only description was, is simply, it was black as coal, the entire body, clothing and everything else that was exposed.
Q. Were you there when the body of Mr. Kelly was taken out?
A. Yes, I was on the slope when his body was placed on the car at the 4th left parting, and his body was placed in the trip as I left the 4th left parting on the slope and walked up, but as I came up and reached the mouth of the slope a few minutes afterwards, the bodies of Flick and Kelly came up. They were the last bodies taken out *out* of the White Ash mine.
Q. What time was that?
A. It was at 11 o'clock at night.

Cross-examination.

By Mr. FIELD:

Q. Who brought Mr. Donohue's body out?
A. The rescuing party.
Q. Well, who?
A. The rescuing party said——

Q. I am not asking you for anything except your personal
461 knowledge of the individual, man or men, who brought Donohue's body out of that mine, if you know; if you don't, say so.

A. I can tell you the names of some of the parties who were there, but the parties were released from time to time as they were giving out as they brought down these bodies.

Q. Did you bring Donohue's body out of the mine?

A. Not out of the place where he was discovered.

Q. Do you know who did?

A. Not the exact man, I do not.

Q. You say that Donohue's body was brought out of that mine about 3 o'clock in the afternoon?

A. Yes, sir.

Q. And you are positive of that?

A. Yes, I am positive of that, about that time; it may be a little later, it may be an hour later for all that.

Q. Could not possibly be more than an hour?

A. It might be an hour and a half, but it was right about that time.

Q. You say that Kelly's body was brought out of that mine about 11 o'clock that night?

A. Yes, I do.

Witness excused.

JOHN DEIGHTON recalled in surrebuttal:

By Mr. TWITCHELL:

Q. Whose bodies were the last ones taken out of the White Ash mine after the explosion?

A. Flick's and Kelly's.

Q. Who took them out?

462 A. Well, I took them from the parting up there.

Q. Whose body did you encounter first?

A. Kelly's.

Q. Whose body did you encounter subsequent?

A. Flick's.

Q. Of what time of the day or night was that?

A. I judge it was somewhere between 10 or 11, that is, I left the house about 9 o'clock.

Q. In the day or night, was that?

A. Night.

Q. I will ask you whether or not at the time you found the bodies of Flick and Kelly, the body of Donohue had been taken out of the mine?

A. Yes, sir.

Q. What time of the day, if you know, was the body of Donohue taken out of the mine?

A. I don't remember.

Q. Who was it carried the safety lamp when you went into the room?

A. I.

Q. Who was with you?

A. Archie Chambers.

Q. Who else?

A. I don't remember the fellows that were along.

Q. When you discovered the body of Flick and Kelly did you find the body of Donohue?

A. No, sir.

463 Cross-examination:

Q. Do you know Charles Kelly, the brother of Alefamro Kelly?

A. Yes, sir.

Q. Was he with you when Kelly's body was found?

A. I don't remember who was along.

Q. You testified on the former trial of this case, didn't you, Mr. Deighton?

A. Yes, sir.

Q. Didn't you testify on that trial that you found Kelly's body about 9 o'clock at night?

A. Well, I left the house at 9 o'clock that night, it was somewhere around there.

Q. Weren't you asked this question: "How long after the explosion were you in room 8?" And did you not answer, "I think about 9 o'clock at night, the explosion was about 10.45 in the day."

A. I don't know whether I did or not.

Q. If you did so testify was it true or false?

A. Well, I am judging now that it was about between 10 and 11 that night.

Q. If you testified that it was at 9 o'clock at night on the former trial, did you tell the truth?

A. Why, yes.

Q. Your knowledge of the matter at that time was much better than it is now, wasn't it?

A. Yes, sir.

Q. Who did find Donohue's body?

A. I don't know.

Q. Did you see Donohue's body?

A. I seen it at home, that's all.

464 Q. Don't you know that 7 o'clock that night they were still looking for Donohue's body and you were still looking for Donohue's body?

—. ——.

Q. Where were you between 6 and 9 o'clock?

A. I was at home.

Q. What time did you go home?

A. I judge between three or four o'clock or something.

Q. Donohue's body had not been found when you went home, had it?

A. No, sir.

Q. And you had not come back, you say, you say now, until about 9 o'clock?

A. Yes.

Q. Then you don't know anything about when Donohue's body came out of the mine or where it came from?

A. I don't know anything about the time. I know it was between the time I went home and came back again.

Redirect examination.

By Mr. TWITCHELL:

Q. You are certain, Mr. Deighton, that at the time you found the bodies of Flick and Kelly that you did not find the body of John Donohue?

Mr. FIELD: Objected to as not proper redirect.

Mr. TWITCHELL: I withdraw the question.

Witness excused.

JAMES MERCHANT, called as a witness for surrebuttal.

465 By Mr. TWITCHELL:

Q. On the evening following the explosion in the White Ash mine, Mr. Merchant, somewhere between 6 and 7, or about 7 o'clock, state where you were?

A. Well, I went out of the mine some time and stayed at home until something like 7 o'clock of the evening; I can't just remember what time it was. Then I came back over to the mine; it was not dark; I don't remember exactly the time; something near 7 o'clock. And I went down in the mine, that is all where I was about at that time.

Q. When you went down into the mine at the point where the curtain was thrown across the main slope, state whether or not you saw the body of John Donohue?

A. Yes, sir.

Q. Where was the body?

A. The body was on the slope at the mouth of the 4th left entry.

Q. I will ask you whether or not at that time all of the bodies had been brought out of the mine?

A. I can't remember whether Donohue's body was the last or whether there was others to come after his.

Q. Well, did you go into the 4th left entry?

A. Yes, sir, I went in part way in the 4th left, as near as I remember; I don't remember just how far I went at; I remember being in the 4th left, some part of it.

Q. Was Archie Chambers in there at that time with the rescuing party looking for bodies?

A. I don't remember who was in there; I do not know who was in there at all.

466 Q. Well, were you in there when the bodies of Flick and Kelly were brought out of the mine?
A. Not that I can remember of.
Q. Then you don't know what time their bodies were brought out?
A. No, sir.

Cross-examination.

By Mr. FIELD:

Q. Might it not have been as much as half past 8 o'clock, or later, when you saw Donohue down there?
A. I don't remember if I lost anything, but it might have been possible that I did in going down the slope, and if I had stopped in going down the slope, it might probably have been that late.
Q. You have no present recollection of the time of the night except that you know it was pretty late at night when you saw Donohue's body there?
A. That is all I remember.
Q. And you don't know whether Flick and Kelly's bodies had been taken out or not?
A. No.

Mr. TWITCHELL: That is our case.

Rejoin-er.

Mrs. LINA ROMERO DE KELLY, called by the plaintiff as a witness in rejoin-er.

By Mr. FIELD:

Q. At what time on the night of the explosion in the White Ash mine was the body of your boy brought to your house?

Objected to as improper rebuttal. Objection overruled. Defendant excepts.

467 A. At 9 o'clock.

Cross-examination.

By Mr. TWITCHELL:

Q. Were you at the house or at the mine, Mrs. Kelly?
A. At my house.
Q. Who was there with you?
A. All my family.
Q. Your son Charles?
A. Yes, sir.

By Mr. FIELD:

Q. Your son, Charles, brought the body, didn't he?
A. Yes, sir.

Mr. FIELD: That is the case.

Court adjourned until 6 p. m., 12, 29, '97.

Court met pursuant to adjournment.

At this time both the defendant and the plaintiff offer requests for peremptory instructions to the jury to find for their respective sides.

The COURT: Both motions will be denied.

Mr. FIELD: I except for the plaintiff.

Mr. TWITCHELL: I except on the part of the defendant.

And thereupon the judge proceeded to instruct the jury as follows:

1.

Gentlemen of the jury, you are instructed that *that* the plaintiff in these cases, Josephine Deserant, is the administratrix of the effects, goods, chattels and estate of Henri Deserant, deceased,
468 her late husband, and of Henri Deserant, deceased, her minor son, and Jules Deserant, deceased, another minor son, and that by an order heretofore made, the three cases, Nos. 3580, 3581 and 3582, in which she is the plaintiff and The Cerrillos Coal Railroad Company is the defendant, have been, and are for the purpose of this trial consolidated, and you are instructed that all the facts brought out and before you in evidence are intended to apply to all the said three cases, and that the law as given you by the court is intended to apply to the said three cases, and in considering the facts and the law as given you by the witnesses and by the court, you will apply the facts and the law to each of said three cases separately, and you will determine each case separately.

2.

You are instructed that the said plaintiff alleges and charges in her three declarations in these cases, that her said deceased husband and her said two deceased minor sons were on the 27th day of February, 1895, employed by the said defendant as coal-miners, and were on said day employed in mining coal for said defendant in the White Ash mine, which at that time belonged to said defendant, and was then under the control and management of the servants, agents and employés of the said defendant, and that while so employed by the defendant, and while so engaged and occupied in so mining coal in said White Ash mine on the said 27th day
469 of February, 1895, an explosion of gases alleged to have accumulated in said White Ash mine occurred, by which plaintiff's intestates were killed in said mine.

3.

The declarations in each of these three cases allege and charge in substance as follows, to wit:

1. That it was the duty and was incumbent on the defendant prior to and at the time of the alleged explosion to employ and keep efficient, experienced and competent men in charge of said

mine to oversee, superintend and manage the works and workings in and about the said mine and any and all things pertaining thereto.

2. That it was the duty and was incumbent on the defendant prior to and at the time of the alleged explosion to provide and keep in proper condition and repair all necessary slopes, air shafts, entries, cross-cuts, air courses, conduits and break-throughs for the free and unobstructed circulation of sufficient pure and fresh air in said mine for the safe and proper protection of the men then working in said mine.

3. That it was the duty and was incumbent on the defendant prior to and at the time of the alleged explosion to provide and keep in proper repair and in constant operation proper and necessary machinery and appliances for the proper and necessary ventilation of the said mine and to supply said mine with a proper and sufficient quantity of fresh air to drive out, expel and dilute
470 and render harmless any and all poisonous, noxious and dangerous gases which might or may have at the time of the alleged explosion accumulated in any part of said mine.

4. That it was the duty and was incumbent on the defendant prior to and at the time of the alleged explosion to employ and keep fit, competent and experienced persons to inspect said mine and detect and discover noxious, poisonous and explosive gases which might accumulate in said White Ash mine, and to warn the employés of defendant of danger from such gases.

—

Plaintiff also alleges in her three declarations in these cases in substance as follows, to wit:

1. That the said defendant carelessly and negligently employed unfit, incompetent, unsuitable, unskillful and inexperienced persons to oversee, manage and superintend the operation and workings of its said White Ash coal mine.

2. That the said defendant negligently and carelessly failed to provide fit, suitable and sufficient air shafts, air passages, stoppings, break-throughs and other conduits through which might be forced by proper machinery and appliances a sufficient quantity of pure air, to dilute and render harmless, noxious, poisonous and explosive gases, which are alleged to have been generated and accumulated in said mine.

3. That said defendant carelessly and negligently provided unfit, unsuitable and insufficient air shafts, air passages, stoppings, break-throughs and other conduits through which a sufficient
471 quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless any noxious, poisonous and explosive gases which might be generated and accumulated in said mine.

4. That the said defendant carelessly and negligently failed to provide suitable and sufficient machinery and other appliances for forcing pure air into said mine and into the working places thereof in sufficient quantity to dilute and render harmless and to expel

therefrom any noxious, poisonous and explosive gases which might be or were from time to time generated in said mine, and to keep the working places of said mine free from the said gases.

5. That the said defendant carelessly and negligently failed to provide or employ fit, competent, skillful and experienced persons to oversee and superintend and manage the operation of said mine, and to inspect the same so as to discover and detect any noxious, poisonous and explosive gases which might be or were generated from time to time in the working places of the said coal mine.

6. That the said defendant carelessly and negligently failed to keep open and free from obstructions the air shafts, slopes, air courses, break-throughs and stoppings in said coal mine for the free circulation of sufficient pure air in the slopes, air courses, entries and rooms and other working places in said mine for the protection and safety of the men working therein.

472 7. That by reason of some alleged careless and negligent acts set forth in plaintiff's declarations, the defendant, through its agents, servants and employés, employed and put in charge of said mine by the defendant permitted noxious, poisonous and explosive gases to accumulate and stand in said mine which it is alleged became ignited and from which it is alleged an explosion occurred on said 27th day of February, 1895, and from which explosion it is alleged plaintiff's intestates were killed and the plaintiff in these suits seeks to recover damages from the defendant for the loss of her said husband and two said sons.

5.

The defendant pleads not guilty and this plea puts in issue all the allegations charged against it by the plaintiff in her declarations.

6.

While there are several counts in each declarations, it is not incumbent on the plaintiff in either of said cases to establish all of the causes of action set forth in the said several counts of the declaration, but if the allegations of any single count of the declaration in each case are established by a preponderance of the evidence, the plaintiff is entitled to recover.

7.

You are instructed that these actions are statutory and the
473 plaintiff claims her right and seeks to recover the damages alleged to have accrued to her under the laws of this Territory, which statute upon which these actions are founded is as follows, to wit:

"Whenever the death of a person shall be caused by the wrongful act, neglect or default of another, although such death shall have been caused under such circumstances as amount in law to a felony and the act or neglect or default is such as would, if death had not ensued, have entitled the party injured to maintain an action and recover damages in respect thereof, then and in every

such case the person who, or the corporation which would have been liable if death had not ensued shall be liable to an action for damages, notwithstanding the death of the person injured."

8.

By section 6 of an act of Congress, approved March 3, 1891, it is provided as follows:

"SEC. 6. That the owners or managers of every coal mine at a depth of one hundred feet or more shall provide an adequate amount of ventilation of not less than fifty-five cubic feet of pure air per second, or thirty-three hundred cubic feet per minute, per every fifty men at work in said mine and in like proportions per a greater number, which air shall by proper appliances or machinery be forced through such mine to the face of each and every working place so as to dilute and render harmless and expel therefrom the noxious or poisonous gases and all workings shall be kept clear of standing gas."

474 If, therefore, the jury believe from the evidence that the defendant, The Cerrillos Coal Railroad Company, was operating a coal mine at a depth of more than one hundred feet below the surface of the earth, and that the plaintiff's intestates respectively, were employed by the defendant in the operation of said coal mine, it was, by reason of the said act of Congress, the duty of the defendant to provide an adequate amount of ventilation of not less than thirty-five cubic feet of pure air per second or thirty-three hundred cubic feet per minute for every fifty men who worked in said mine, which air should have been, by proper appliances or machinery, forced through such mine to the face of each and every working place therein, so as to dilute and render harmless and expel therefrom the noxious or poisonous gases, and all workings of such mine should have been kept clear of standing gas in dangerous quantities; and if the jury believe from the evidence that the defendant, The Cerrillos Coal Railroad Company, failed or neglected to provide an adequate amount of ventilation so as to dilute and render harmless and expel from the said mine the noxious poisonous gases which were generated therein, or to keep the working places of said mine clear of standing gas, such failure on the part of the defendant may be considered by the jury as evidence of negligence on the part of the defendant.

9.

475 Negligence is defined to be the ommission to do something which a reasonable man, guided by those considerations which ordinarily regulate the conduct of human affairs, would do, or the doing something which a prudent and reasonable man would not do. It must be determined in all cases by reference to the situation and knowledge of the parties and all the attending circumstances. If an occupation attended with danger can be prosecuted by proper precautions without fatal results, such precautions must be taken by the promoters of the pursuit or employers of laborers therein. All occupations producing articles or works of

necessity, utility or convenience, may undoubtedly be carried on and competent persons familiar with the business and having sufficient skill therein, may properly be employed upon them, but in such cases where the occupation is attended with danger to life or limb, it is incumbent on the promoters thereof, and the employers or others thereon, to take all reasonable and needed precautions to secure safety to the persons engaged in their prosecution, and for any negligence in this respect from which injury follows to the persons engaged, such promoters and employers may be held responsible and mulcted to the extent of the injury inflicted, if any. Occupations, however important, which cannot be conducted without necessary danger to life, body or limb, should not be prosecuted at all without reasonable precautions against such dangers afforded by science. The necessary danger attending them should operate as a prohibition of their pursuit without such safeguards. In-
476 deed, it may be laid down as a legal principle that in all occupations attended with great and unusual danger, there must be used all appliances readily attainable known to science for the prevention of accidents, and that a neglect to provide such readily attainable appliances, and to keep the same in fit and suitable condition, will be regarded as proof of culpable negligence.

10.

I charge you, gentlemen, that it is the duty of the master to use reasonable care and diligence to provide a reasonably safe place in which his servants shall perform their respective duties, and also to use reasonable care and diligence to provide reasonably safe appliances for the protection of his servants, and to use reasonable care and diligence to keep such appliances in a reasonably safe condition for the protection of his servants; and the master cannot, by the delegation of any part of his duty to an agent, or servant, relieve himself of responsibility for injuries to his servants arising from the neglect of this duty. Any agent or servant of the master, appointed by him for the purpose of looking to the safety of such appliances without regard to the rank or station of such agent, or servant, is the representative of the master for such purpose, and the negligence of any such agent or servant in such matters, is, in contemplation of the law, the negligence of the master and the master is liable for any damage occasioned thereby.

477 11.

Although you may believe from the evidence that the fellow-servants of the deceased by their negligence contributed to the bringing about of the explosion in which deceased were killed, yet, if you also believe from the evidence that the negligence of defendant also contributed to the same result, you must find a verdict in favor of the plaintiff, unless you believe from the evidence that plaintiff's intestates, or one of them knew or had means of knowledge of such negligence of defendant, and notwithstanding such knowledge or means of knowledge, continued to work in the mine of defendant.

12.

The law requires that the defendant shall keep the workings in its mine clear of standing gas, and if you believe from the evidence the defendant failed to keep the workings in its mine clear of standing gas, and that such failure contributed to the deaths of the deceased, then you are justified in believing defendant guilty of negligence and you must find a verdict in favor of the plaintiff unless you believe from the evidence that the plaintiff's intestates or one of them knew of the existence of such gas and continued to work in the mine of defendant with such knowledge.

13.

478 If the jury believe from the evidence that the plaintiff's intestates knew or had reason to know that dangerous bodies of gas were permitted to accumulate in the open places of defendant's mine and to remain for a period of thirty-six hours or more, without any effort on the part of the agents and the servants of defendant to move the same, and that no precautions against the explosion of such gases were accustomed to be taken except to mark the open place where such gas might be with a danger mark, and plaintiff's intestates, notwithstanding such knowledge or means of knowledge, continued to work in said mine, the plaintiff's intestates thereby assumed the risk incident to such method and cannot recover if their fellow-servants ignited such gas by going over or disregarding such fire-mark.

14.

If you believe from the evidence that the explosion originated in room eight of the fourth left entry of the mine in consequence of the accumulation in said room of a body of dangerous gas, merely guarded by a fire-mark or danger signal for thirty-six or forty-eight hours before the explosion, and that plaintiff's intestates did not consent or agree to work in said mine with places dangerous because of gas merely guarded by fire-marks or danger signals for thirty-six or forty-eight hours, then plaintiff is entitled to recover in each case, although you may also believe that said body of dangerous gas was ignited by the negligence of fellow-servants of plaintiff's intestates.

479 15.

If you reach the conclusion that plaintiff is entitled to recover, then, in estimating the amount of damages to be assessed for the deaths of the several intestates of plaintiff, you must take into consideration the proof, if any, as to age, earning capacity, health, habits and probable duration of life, and from that proof ascertain what is the present worth of the life of deceased with nothing to be added by way of solace to the party or parties entitled to the proceeds of recovery, and nothing for suffering or anguish of mind or body by the deceased. In considering such proof you are instructed that life and annuity tables, showing at

any age the probable duration of life, and the present value of a life annuity, are competent evidence, but you are instructed that the rules to be derived from such tables, or computations, are not to be taken as the absolute guide of your judgment and conscience, but if you find in favor of the plaintiff you should award a fair and reasonable compensation, taking into consideration what the income of plaintiff's intestate would probably have been, how long it would have lasted, and all the contingencies to which it was liable, such as probable diminution or increase of earning capacity, and that you are not to be bound by precise mathematical rules in deciding a question involving so many contingencies incapable of exact estimate or proof.

480 16.

In these cases, the burden of proof is upon the plaintiff to make out her case by a preponderance of the evidence, and by a preponderance of the evidence is meant that the evidence on behalf of the plaintiff must be of greater probative force and must outweigh the evidence on behalf of the defendant. It is not, however, required as in criminal cases, that the plaintiff shall make out her case by evidence, beyond a reasonable doubt, or to the exclusion of every possibility of a want of negligence on the part of the defendant. If the evidence is equally balanced, however, so that the jury cannot from the evidence determine whether or not the defendant was guilty of negligence, the plaintiff cannot recover.

17.

You are the sole judges of the credibility of the witnesses and of the weight to be given to the testimony of each witness; and in determining the weight to be given to the testimony of any witness you may consider his manner and conduct on the stand, his relation to the party and his interest, if any, in the result of the case.

18.

The court hands you herewith blank forms for your verdicts in all the cases, one set of such forms for use in case you find the issues in favor of the plaintiff, and the other set for use in case
481 you find the issues in favor of the defendant. If you find in favor of the plaintiff, you will fill in the amount of damages. if you find any, in the blanks for each case separately in the first set of verdicts, and you will sign each verdict separately. If you find in favor of the defendant you will sign each verdict in the other set separately.

And the court, at the request of counsel for defendant, proceeded further to instruct the jury as follows:

1.

The jury are instructed that what was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and

use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine, that were obvious or might with reasonable diligence have become known; and in the absence of evidence to the contrary, it is presumed that the defendant performed its entire duty towards the miners in that respect.

6.

Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room eight for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room eight, and further believe from the evi-
482 dence that signals of the kind described in the evidence warning against entry into said room were placed in such a manner as to be observed by the deceased Flick and Kelly, and the meaning and significance of such signal was understood by them and such signal was known to be in use by the miners engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantity, then if the jury believe from the evidence that such explosion was caused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in its favor.

10.

The burden of showing negligence on the part of the defendant, that caused the death of the persons for which this action is brought is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air course through which that portion of the mine where the deceased persons worked was ventilated. The presumption is that the mine was properly and sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find not only a partial obstruction of the air course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony the jury believe that notwithstanding the partial obstruction existed, there still was space enough in the air course unobstructed to
483 allow the proper and sufficient ventilation of the mine and of the fourth left entry where such deceased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons.

11.

If the jury shall believe from the evidence that the defendant permitted fire-gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly or either of them, by going into the said room with a naked light (contrary to the rules and orders of

the defendant) and by such naked light the fire-gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion and injury were directly and immediately caused by the act of the fellow-servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor; and a verdict should be rendered for the defendant.

And the plaintiff then and there objected to the giving of the instruction numbered one asked by defendant, because said instruction fails to tell the jury that it was incumbent on the defendant to use reasonable care to keep its appliances in a reasonably safe condition, and because it is in conflict with instruction numbered ten given by the court in its general charge; and because it is
484 erroneous in that while purporting to set forth the full measure of defendant's duty, it fails in several important particulars to do so, especially as to the duty of defendant to use due care to employ fit and competent persons to look to the safety of its appliances, etc.; but the court overruled said objection, and to the action of the court in overruling said objection and in giving said instruction, plaintiff then and there duly excepted.

And plaintiff also objected to the giving of instruction numbered six asked for by defendant because it ignores the evidence tending to show that Donohue, the mine foreman, went into room eight with Flick and Kelly and does not tell the jury the legal effect of the ignition of the gas by Donohue if they should believe it was so ignited; and also because it fails to tell the jury that the ignition of the gas by Flick and Kelly would not excuse defendant unless plaintiff's intestates had knowledge or means of knowledge of the existence of the gas and of the method of using fire-marks or danger signals and consented to work with such knowledge; and because there is no evidence upon which the court could properly submit to the jury the question of the use of fire-marks or danger signals against gas known to the fire bosses and mine foreman to have accumulated in the mine; and because it tells the jury that if Flick and Kelly entered the room with a naked light and caused the explosion, defendant is entitled to a verdict without telling the jury that they must have seen the fire-mark and danger signal and crossed it contrary to its demand; and also because the instruction
485 is in direct conflict with instructions numbered 10, 11, 12, 13 and 14 given by the court in its general charge; but the court overruled said objection, and to the action of the court in overruling said objection and in giving said instruction to the jury the plaintiff then and there duly excepted.

And plaintiff objected to the giving of instruction numbered ten asked by defendant, because it is not a correct statement of the law; because it amounts to a comment on the weight of the evidence; because it selects a portion of the evidence and makes it unduly prominent, and tends to induce the jury to consider the evidence piecemeal; because it tells the jury that if the obstruction in the air course was not sufficient to prevent the passage of the necessary quantity of air, the defendant is not liable, and in effect that if the

space left in the air course was sufficient to permit the passage of such necessary quantity of air, they should assume that such necessary quantity of air was passing through it to the working places in the mine and there was nothing about the ventilation of the mine to which they need give attention, notwithstanding that the evidence shows that the air was not going to the face of room eight for more than forty-eight hours before the explosion; but the court overruled said objection, and to the action of the court in overruling said objection and in giving the said instruction to the jury, the plaintiff then and there duly excepted.

And the plaintiff objected to the giving of instruction numbered eleven, given at the request of defendant, because there is no
486 evidence in the case upon which the same could properly be based, there being no evidence from which the jury could properly infer that Flick and Kelly went into room eight contrary to any rule or order of defendant, while the instruction ignores the evidence which tended to show that Flick and Kelly went into room eight in company with the mine foreman and under his direction; and because said instruction in effect tells the jury that from the fact that Flick and Kelly were found dead in room eight they might nfer that they went in there contrary to orders and rules of defendant, as there is no evidence of any violation by Flick and Kelly of any order or rule of the company except the bare fact that they were found dead in the room; and also because said instruction is in conflict with instructions numbered 11, 12, 13 and 14 in the general charge of the court; but the court overruled said objection, and to the action of the court in overruling said objection and in giving said instruction to the jury, plaintiff then and there duly excepted.

And plaintiff further objected to the giving of the instructions numbered six and eleven, as asked by defendant, because the court should have told the jury that if Flick and Kelly went into room numbered eight, in company with or under the direction of the mine foreman, Donohue, without any knowledge of the existence in said room of a dangerous body of gas at the time of going in, and that at the time of the explosion they were using due care to avoid accident, the defendant was liable notwithstanding the explosion may have been directly occasioned by the act of
487 Flick and Kelly; and to the action of the court in overruling said objection and in giving the said instructions, the plaintiff then and there excepted.

And plaintiff further objected to the said instructions asked by defendant, and numbered six and eleven, because they ignore the fact that there was evidence tending to show that Donohue's body was found in room number eight in close proximity to the bodies of Flick and Kelly, and the fact that from this evidence the jury might infer that Donohue ignited the gas; but the court overruled said objection, and to the action of the court in overruling said objection and in giving the said instructions, the plaintiff then and there duly excepted.

And the said jury having returned a verdict in favor of the de-

fendant, afterwards, to wit, on the 3d day of January, 1898, the plaintiff by her attorneys, made and filed her motion for a new trial, which motion was in the words and figures following, to wit:

JOSEPHINE DESERANT, Administratrix,
vs.
THE CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582.

Now comes the plaintiff in each of the above entitled three causes by her attorneys, and moves the court to set aside the verdict rendered in each of said causes at a former day of his term, and to grant her a new trial therein, for the following reasons:

488

I.

The verdict is against the law.

II.

The verdict is against the evidence.

III.

The verdict is against the weight of the evidence.

IV.

The verdict is entirely unsupported by the evidence.

V.

The verdict is against the law and the evidence.

VI.

The court admitted improper evidence over the objection of the plaintiff.

VII.

The court refused to admit proper and legal evidence offered by the plaintiff.

VIII.

The court erred in refusing to instruct the jury as requested by the plaintiff at the close of the evidence, that the defendant was guilty of negligence.

489

IX.

The court erred in refusing to take the case from the jury and find the facts when both plaintiff and defendant asked for a peremptory instruction.

X.

The court erred in submitting anything to the jury except the question of the assessment of plaintiff's damages.

XI.

The court erred in giving the instruction number one asked by the defendant, as follows, to wit:

"The jury are instructed that what was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine, that were obvious or might with reasonable diligence have become known; and in the absence of evidence to the contrary it is presumed that the defendant performed its entire duty towards the miners in that respect."

Because said instruction fails to tell the jury that it was incumbent on the defendant to use reasonable care to keep its appliances in a reasonably safe condition and the same is in conflict with
490 instruction number 10 given by the court in its general charge. Said instruction is also erroneous in that while purporting to set forth the full measure of the defendant's duty it fails in several important particulars to do so, especially as to the duty of the defendant to use due care to employ fit and competent persons to look to the safety of its appliances, etc.

XII.

The court erred in giving instruction number six asked by the defendant, as follows, to wit:

"Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room eight for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room eight, and further believe from the evidence that signals of the kind described in the evidence warning against entering into said room were placed in such a manner as to be observed by the deceased Flick and Kelly, and the meaning and significance of such signal was understood by them and such signal was known to be in use by the miners engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantities then if the jury believe from the evidence that such explosion was caused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in his favor."

491 Because the said instruction ignores the evidence on behalf of plaintiff tending to show that Donohue, the mine foreman, went into room eight with the miners Flick and Kelly and does not tell the jury the legal effect of the ignition of the gas by Donohue if they should believe that it was so ignited. It also fails to tell the jury that the ignition of the gas by Flick and Kelly would not excuse the defendant, unless the plaintiff's intestates had knowledge or means of knowledge of the existence of the gas and of the method of using fire-marks or danger signals and consented to work with

such knowledge, and because there was no evidence in the case upon which a court could properly submit to a jury the question of the use of fire-marks or danger signals as against gas known to the fire bosses and mine foreman to have accumulated in the mine, and said instruction tells the jury that if Flick and Kelly entered the room with a naked light and thus caused the explosion, the defendant is entitled to a verdict without telling the jury that they must have seen the fire-mark or danger signal and crossed over it contrary to its command. The said instruction is also in direct conflict with instructions numbers 10, 11, 12, 13 and 14 given by the court in its general charge.

XIII.

The court erred in giving instruction number 10 asked by the defendant as follows, to wit:

"The burden of showing negligence on the part of defend-
492 ant, that caused the death of the persons for which this action is brought is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air courses through which that portion of the mine where the deceased persons worked was ventilated. The presumption is that the mine was properly and sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find not only a partial obstruction of the air course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony the jury believe that notwithstanding the partial obstruction existed there still was space enough in the air course unobstructed to allow the proper and sufficient ventilation of the mine and of the fourth left entry where such deceased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons."

Because the said instruction is not a correct statement of the law. It amounts to a comment on the weight of the evidence, and selects out a portion of the evidence and makes it unduly prominent, and tends to induce the jury to consider the evidence piecemeal. It tells the jury that if the obstruction in the air course was not sufficient to prevent the passage of the necessary quantity of air, the defendant was not liable and in effect tells the jury that if the space left in the air course was sufficient to permit the passage of
493 such necessary quantity of air they should assume that such necessary quantity of air was passing through it to the working places in the mine and there was nothing about the ventilation of the mine to which they need give attention, notwithstanding the evidence showed that the air was not going to the face of room eight for more than forty-eight hours before the explosion.

XIV.

The court erred in giving instructions number eleven given at the request of defendant as follows, to wit:

"If the jury shall believe from the evidence that the defendant permitted fire-gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly or either of them, by going into the said room with a naked light (contrary to the rules and orders of the defendant) and by such naked light the fire-gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion and injury were directly and immediately caused by the act of the fellow-servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor; and a verdict should be rendered for the defendant."

Because there is no evidence in the case upon which the said instruction could properly be based, there being absolutely no evidence from which the jury could properly infer that Flick and Kelly
494 went into room eight contrary to any rule or order of the defendant company and the said instruction ignores the evidence which tended to show that Flick and Kelly went into room eight in company with Donohue, the mine foreman and under his direction; and as there is no evidence of any violation of any order or rule of the company except the bare fact that they were found dead in the room, said instruction in effect tells the jury that if Flick and Kelley were found dead in room eight they might infer from that fact alone, that they went in there contrary to the orders or rules of the defendant, and also because said instruction is in conflict with instructions numbered 11, 12, 13 and 14 in the general charge of the court.

XV.

Because the court should have told the jury that if Flick and Kelly went into room number eight in company with or under the direction of the mine foreman, Donohue, without any knowledge of the existence in said room of a dangerous body of gas, at the time of going in, and that at the time of the explosion Flick and Kelly were using due care to avoid accident, the defendant was liable, notwithstanding the explosion may have been directly occasioned by the act of Flick and Kelly.

XVI.

Because the court in its charge to the jury ignored the fact
495 that there was evidence tending to show that Donohue's body was found in room number eight in close proximity to the bodies of Flick and Kelly, and the fact that from this evidence the jury might infer that Donohue ignited the gas.

XVII.

Because the verdict of the jury is manifestly the result of a misapprehension of the case by the jury or of improper influences exercised on the jury outside of the court-house.

XVIII.

Because the plaintiff has not had a fair and impartial trial and is entitled to have each of said causes submitted to another jury.

FRANK W. CLANCY,
NEIL B. FIELD,
Attorneys for Plaintiff.

And the said motion having been argued by counsel and submitted to the court was taken under advisement, and afterwards, to wit: on the fourth day of February, 1898, was denied by the court, to which *the* ruling and action of the court in denying the said motion for a new trial, the plaintiff then and there duly excepted.

And because the foregoing matters are not matters of record in said causes, the plaintiff prays that this her bill of exceptions containing the same may be signed, sealed and made a part of
496 the record, which is accordingly done this 22d day of June, 1898; and it is hereby certified that this bill of exceptions contains all of the evidence given on the trial of said causes, and all of the instructions which were given to the jury.

JOHN R. McFIE, [SEAL.]
Associate Justice of the Supreme Court of the Territory of New Mexico and Judge of the District Court for the County of Santa Fé.

Defendant agrees to the correctness of the foregoing bill of exceptions, and consents that the same may be signed and sealed by any justice of the supreme court.

R. E. TWITCHELL,
Att'y for Defendant.

June 21, 1898.

And afterwards, to wit, on the 23d day of June, 1898, there was filed in the office of said clerk a stipulation, which stipulation was in the words and figures following, to wit:

497 In the District Court for the County of Santa Fé.

JOSEPHINE DESERANT, Administratrix,
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

It is hereby stipulated and agreed by and between the parties to the said three causes that the clerk of this court may make and certify a single record in return to the three writs of error issued from the supreme court of the Territory to bring up said causes for review, and that this stipulation shall be considered as a part of the record herein, and shall be incorporated by said clerk in his transcript.

NEILL B. FIELD,
F. W. CLANCY,
Attorneys for Plaintiff.
R. E. TWITCHELL,
Attorney for Defendant.

TERRITORY OF NEW MEXICO,
County of Santa Fé.

I, the undersigned clerk of the district court for said county do hereby certify that the foregoing is a full, true and perfect copy of so much of the record in three certain cases lately pending
498 in said district court in each of which Josephine Deserant, administratrix, was plaintiff and Cerrillos Coal Railroad Company was defendant, as the counsel for said plaintiff directed me to make up and include herein as my return to the writs of error issued out of the supreme court of said Territory for the purpose of taking up for review the record and proceedings of each of said cases.

In witness whereof I have hereunto set my hand and the seal of said district court this 24th day of June, 1898.

[SEAL.] A. M. BERGEVE, *Clerk.*

499 And afterwards, to wit, on the 25th day of July, 1898, there was filed in the office of the clerk of the supreme court for the Territory of New Mexico an assignment of errors in said causes; which said assignment of errors is in words and figures following, to wit:

TERRITORY OF NEW MEXICO:

In the Supreme Court, July Term, A. D. 1898.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. No. 777.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. No. 778.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. No. 779.

Consolidated.

Assignment of Errors.

Comes now the plaintiff in error in each of the three above and foregoing consolidated cases and shows to the court here that in the record, proceedings, and judgments of the district court of the county of Santa Fé, in the Territory of New Mexico, there is manifest error to the prejudice of this plaintiff in error in this, to wit:

I.

The court erred in overruling the objection of plaintiff in error to the question, "Then if this explosion occurred at 10.45 state whether or not—state what at that particular time the miners in the room would be engaged in." (Page 132 of Transcript.)

II.

The court erred in permitting the witness Fletcher to testify over objection of plaintiff in error that he had seen flame from a gunning shot extend seventy feet in the third right entry of the White Ash mine. (Trans., page 134.)

III.

The court erred in permitting the witness Fletcher to answer the question, "What effect, if any, would such a condition have upon small quantities of gas there passing in any portion of the mine or in any portion of fourth left entry which, under ordinary conditions, would in no way be dangerous in the operation of the mine?" (Trans., page 135.)

IV.

The court erred in permitting the witness Fletcher to answer the question, "From your experience as a miner and your connection with mines which generate gas, what have you to say with reference to the possibilities of a sudden and unlooked-for appearance of gas at any place in the White Ash mine?" (Transcript, page 148.)

500

V.

The court erred in permitting the witness Fletcher to answer the question, "I will ask you what any two men going into room 8 and finding the brattice in that room down, would have done if they had seen a danger signal lying across the track in that room?" (Transcript, page 178.)

VI.

The court erred in refusing to permit the witness Kilpatrick to answer the question, "Was there any means provided for removing that water from the 4th left air course prior to the explosion?" (Transcript, page 227.)

VII.

The court erred in permitting the witness Duggan to answer the question, "With reference to the operation of coal mines of the character of the White Ash, I will ask you now, whether or not you are able to state whether the stoppings in the various cross-cuts were or were not of the kind accustomed to be used and placed in mines of that character for the purpose of carrying air around to the face of the working places?" (Transcript, page 347.)

VIII.

The court erred in refusing to permit the witness Duggan to answer the question, "If such an opening were made by the fire boss under the direction of the mine fireman, should it have been reported to you?" Transcript, page 374.

IX.

The court erred in refusing to permit the witness Duggan to answer the question, "Unless that had been done it would have been impossible to go into the mine, would it not, Mr. Duggan?" Transcript, page 378.

X.

The court erred in refusing to permit the witness Duggan to answer the question, "And the fact of the business is, Mr. Duggan, that you don't know anything about this, and that you are trying to speculate, theorize upon some theory that would result in releasing the defendant company from liability, is that not so?" (Transcript, page 387.)

XI.

The court erred in refusing to instruct the jury at the close of the evidence that the defendant was guilty of negligence.

XII.

The court erred in refusing to take the case from the jury and find the facts when both parties asked for peremptory instructions.

XIII.

The court erred in submitting to the jury anything except the question of damages.

XIV.

The court erred in giving instruction number 1 asked by the defendant as follows: "The jury are instructed that — was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine, that were obvious or might with reasonable diligence have become known; and in the absence of evidence to the contrary, it is presumed that the defendant performed its entire duty towards the miners in that respect." (Trans., page 481.)

XV.

The court erred in giving instruction No. 6 asked by the defendant as follows, to wit: "Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room 8 for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room 8, and further believe
501 from the evidence that *that* signals of the kind described in the evidence warning against entry into said room were placed in such manner as to be observed by the deceased Flick and Kelly, and the meaning and significance of such signal was understood by them and such signal was known to be in use by the miners

engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantity, then if the jury believe from the evidence that such explosion was caused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in its favor." (Trans., page- 481–'2.)

XVI.

The court erred in giving instruction No. 10 asked by tha defenendant, as follows, to wit: "The burden of showing negligence on the part of the defendant, that caused the death of the persons for which this action is brought is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air course through which that portion of the mine where the deceased persons worded was ventilated. The presumption is that the mine was properly and sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find not only a partial obstruction of the air course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony, the jury believ- that notwithstanding the partial obstruction existed, there still was space enough in the air course unobstructed to allow the proper and sufficient ventilation of the mine and of the fourth left entry where such dec-ased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons." (Trans., page- 482–'3.)

XVII.

The court erred in giving instruction No. 11 asked by the defendant, as follows, to wit: "If the jury shall believe from the evidence that the defendant permitted fire-gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly or either of them, by going into said room with a naked light (contrary to the rules and orders of the defendant) and by such naked light the fire-gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion and injury were directly and immediately caused by the act of the fellow-servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor; and a veadict should be rendered for the defendant." (Trans., page 483.)

XVIII.

The court erred in failing to instruct the jury that if Flick and Kelly went into room eight in company with or under the direction of the mine foreman, Donahoe, without any knowledge of the existence in said room of a dangerous body of gas at the time of going in, and that at the time of the explosion Flick and Kelly were using due care to avoid accident, the defendant was liable, notwithstand-

ing the explosion may have been directly occasioned by the act of Flick and Kelly. (Trans., page 494.)

XIX.

The court erred in its charge to the jury by ignoring the fact that there was evidence tending to show that Donahoe's body was found in room eight in close proximity to the bodies of Flick and Kelly and also the fact that from this evidence the jury had a right to infer that Donahoe ignited the gas.

XX.

The court erred in overruling the motions for new trials.

502 Wherefore the said plaintiff in error prays that the said record and proceedings and the judgments may be examined by this honorable court, the errors therein corrected, said judgments reversed, and that she may be restored to all things which she hath lost by reason thereof.

NEILL B. FIELD,
F. W. CLANCY,
Attorneys for Plaintiff in Error.

Now comes the above-named defendant in error and joins in error and says that there is no error in the record and proceedings in the said three cases consolidated

By R. E. TWITCHELL,
Attorney for Defendants in Error.

And thereafter, at a regular term of the supreme court of the Territory of New Mexico, begun and held at Santa Fé, New Mexico, the seat of government of said Territory, on the last Monday of July, being the first day of said term, and the same being the 25th day of July, A. D. 1898, the following, among other, proceedings were had as follows, to wit:

JOSEPHINE DESERANT, Administratrix, Plaintiff in Error, vs. CERRILLOS COAL RAILROAD COMPANY, Defendant in Error.	No. 777, 778, 779. Error to District Court, Santa Fé County.

Now comes plaintiff in error, by her attorneys, Messrs. Neill B. Field and F. W. Clancy, and defendant in error comes, by its attorney, R. E. Twitchell, Esquire, and by agreement of the said parties in open court it is ordered by the court that these three causes be, and they hereby are, consolidated, to be heard as one cause, as though there were but one judgment and one record; that but one transcript of the record in the court below be required for the three cases, and but one set of briefs on each side.

503 And afterwards, to wit, at the regular term of said supreme court last aforesaid, on the 22nd day thereof, the same being Monday, August 22nd, 1898, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Administratrix, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, *Plaintiff* in Error.	777, 778, 779. Error to Santa Fé County.

This cause coming on to be heard on the transcript of record, assignment of errors, and brief of counsel, was partly argued by F. W. Clancy for plaintiff in error.

And afterwards, to wit, at the regular term of said supreme court last aforesaid, on the twenty-third day thereof, the same being Tuesday, August 23, 1898, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Administratrix, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, Defendant in Error.	777, 778, 779. Error to Santa Fé County.

This cause again coming on to be heard was argued by F. W. Clancy, Esq., and Neill B. Field, Esq., for plaintiff in error, and R. E. Twitchell, Esq., for defendant in error, and submitted to the court, and the court, not being sufficiently advised in the premises, takes the same under advisement.

504 And afterwards, to wit, on the 24th day of January, A. D. 1899, there was filed in the office of the clerk of the supreme court for the Territory of New Mexico an additional transcript of record in the above-entitled cause; which said transcript is in words and figures as follows, to wit:

In the District Court in and for the County of Santa Fé, in the First Judicial District of the Territory of New Mexico.

DESERANT, Adm'ix, *versus* CERRILLOS COAL RAILROAD CO.	Nos. 3580, 3581, and 3582.

Motion.

Now comes the defendant in the above-entitled causes and states to the court that heretofore, to wit, on the sixteenth day of December, A. D. 1897, at a term of the said district court then in session, the trial of the above-entitled causes was begun and had, and there-

after, at such term, on, to wit, the thirtieth day of December, A. D. 1897, the said trial was concluded, and the verdict of the jury in said causes was duly returned into court finding the defendant in said causes not guilty; whereupon a notice of a motion for a new trial was given by plaintiff in said causes, and thereafter, to wit, on the third day of January, A. D. 1898, said motion was by plaintiff duly filed, and then and there argued, and thereafter, to wit, on the fourth day of February, A. D. 1898, the said motion for new trial was by the said court overruled and denied and judgment then and there by the court rendered and announced in favor of the defendant in the said causes; that, notwithstanding the said proceedings, no entry of record appears in the said district court setting forth such judgment of the said district court in favor of the said defendant in the said causes, as the same was rendered and announced by the said court.

Defendant therefore moves the court that the clerk of this court be instructed, directed, and authorized to enter in the records of this court, and to insert therein of record in the above-entitled causes, *nunc pro tunc*, as of the fourth day of February, A. D. 1898, the judgment of the said court then rendered and announced, adjudging that the defendant herein go hence without day, and that defendant have such other further relief as may be proper in the premises.

H. L. WALDO,
R. E. TWITCHELL,
Attorneys for said Def't.

505 In the District Court, County of Santa Fé, First Judicial District, Territory of New Mexico.

DESERANT, Adm'x,
versus
CERRILLOS COAL RAILROAD CO. } No. 3580, 3581, and 3582.

Order.

It appearing to the court, by the motion of said defendant, that heretofore, to wit, on the 16th day of December, A. D. 1897, at a term of the said district court then in session, the trial of the above-entitled causes was begun and had, and thereafter, at such term, on, to wit, the 30th day of December, A. D. 1897, the said trial was concluded, and the verdict of the jury in said causes was duly returned into court, finding the defendant in said causes not guilty; whereupon a notice of a motion for a new trial was given by the plaintiff in said causes; and thereafter, to wit, on the 3rd day of January, A. D. 1898, the said motion for new trial was by the said court overruled and denied, and judgment then and there by the court rendered and announced in favor of the defendant in the said causes, and that, notwithstanding the said proceedings, no entry of record appears in the said district court setting forth such judgment of the said district court in favor of the said defendant in the

said causes as the same was rendered and announced by the said court; whereupon and by reason whereof said defendant now moves the court that the clerk of this court be instructed, directed, and authorized to enter in the records of this court and to insert therein of record in the above-entitled causes, *nunc pro tunc*, as of the fourth day of February, A. D. 1898, the judgment of the said court then rendered and announced, adjudging that the defendant herein go hence without day, and that defendant have such other further relief as may be proper in the premises; and the court being now suffi ciently advised therein—

It is therefore considered, ordered, and adjudged that the clerk of this court be, and he is hereby, authorized, directed, and ordered to insert and enter as part of the record in the above-entitled causes in this court, *nunc pro tunc*, as of the fourth day of February, A. D. 1898, the words and figures following, to wit:

"DESERANT, Adm'x,
versus
CERRILLOS COAL RAILROAD COMPANY. } Nos. 3580, 3581, and 3582.

These causes coming on for hearing on the motion of the
506 plaintiff to set aside the verdict and for a new trial herein, the court, on consideration thereof, overrules the same; and it is therefore considered by the court that the said defendant go hence without day and recover from the plaintiff its costs herein expended."

JOHN R. McFIE, *Judge*, &c.

January 23rd, 1899.

TERRITORY OF NEW MEXICO:

District Court, First Judicial District, County of Santa Fé.

DESERANT, Adm'x,
vs.
CERRILLOS COAL RAILROAD CO. } No. 3580, No. 3581, No. 3582.

I, A. M. Bergere, clerk of the district court of the first judicial district in the Territory of New Mexico, do hereby certify that the foregoing 2 pages and 9 lines contain a true, correct, and complete copy of motion & order, *nunc pro tunc*, of judgment in the above-entitled causes.

In witness whereof I have hereunto set my hand and the seal of said court, at my office, in the city of Santa Fé and
[SEAL.] county and Territory aforesaid, this 23rd day of January, A. D. 1899.

A. M. BERGERE, *Clerk*.

507 And afterwards, at the regular term of said supreme court last aforesaid, on the thirty-sixth day thereof, the same being Tuesday, February 21st, 1899, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'r'x, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD CO., Defendant in Error. | No. 777, '8, '9. Error to District Court, Santa Fé County.

Now comes the plaintiff in error, by her attorney, F. W. Clancy, and the defendant in error, by its attorney, R. E. Twitchell, and show to the court here that the transcript of the record of these cases, sent from the district court prior to the hearing of these cases in this court, was defective in that it failed to show the final judgment of the district court, although such judgment was actually rendered in and by said district court, and that the record in said district court has been corrected by the entry of a judgment, *nunc pro tunc*, as of the fourth day of February, 1898, as appears from an additional transcript certified from the district court, which additional transcript is now submitted to the court; and thereupon, by agreement of said parties, by their said attorneys, it is ordered by the court that the said additional transcript be received and filed as a part of the record in these cases, with the same force and effect as though it had been included in and made a part of the original transcript of record from the district court; therefore, these cause having been heretofore heard and submitted to and taken under advisement by the court upon a former day of the present term, the court, being now sufficiently advised in the premises, announces its decision, by Chief Justice William J. Mills, Associate Justices John R. McFie, J. W. Crumpacker, Frank W. Parker, and Charles A. Leland concurring, affirming the judgment of the court below for reasons stated in the opinion of the court on file. It is therefore considered and adjudged by the court that the judgment of the district court in and for the county of Santa Fé, whence this cause came into this court, be, and the same hereby is, affirmed, and that, in accordance therewith, it is therefore considered and ad-
508 judged by the court that the said defendant in error go hence without day, and recover from said plaintiff in error its costs herein expended.

509 And afterwards, at the regular term of said supreme court last aforesaid, on the fortieth day of said term, the same being Saturday, February 25, 1899, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Admr., Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, Defendant in Error. | Nos. 777, 778, and 779. Error to District Court of Santa Fé County.

On motion of said plaintiff in error, by her attorney, F. W. Clancy, it is ordered by the court that the map filed in the office of the clerk of this court and marked on the face thereof "Map showing the inside workings of the Cerrillos Coal Railroad Com-

pany's White Ash mine at Madrid, N. M.," be, and the same hereby is, allowed to be withdrawn from the files of this court for the purpose of transmission to the Supreme Court of the United States, to be used upon the hearing of said causes before said court, and the clerk is authorized and directed to transmit said map with the record herein as a part thereof to the Supreme Court of the United States.

510 And afterwards, to wit, on the 17th day of December, 1898, there was filed in the office of the clerk of the supreme court of New Mexico the opinion of said court rendered in said cause; which said opinion is made a part of this transcript and is in the words and figures following, to wit:

511 In the Supreme Court of the Territory of New Mexico, the July Term, 1898.

JOSEPHINE DESERANT, Admi'x of the Estate of Henry Deserant, Deceased, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, Defendant in Error.	No. 777. Error to Santa Fé County.
JOSEPHINE DESERANT, Admi'x of the Estate of Jules Deserant, Deceased, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, Defendant in Error.	No. 778. Error to Santa Fé County.
JOSEPHINE DESERANT, Admi'x of the Estate of Henry Deserant, Jr., Deceased, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, Defendant in Error.	No. 779. Error to Santa Fé County.

Syllabus.

No. 1. In a suit brought to recover for the death of a coal-miner who is killed in an explosion in a coal mine, where the plaintiff claims that the explosion was caused by an air course being partially obstructed by an accumulation of water so that sufficient air was not passing through it to properly ventilate the mine, the burden of proof is on the plaintiff to show that such air course was so obstructed that sufficient air was not passing through it.

No. 2. The pit boss of a mine, working under a superintendent who has charge of the whole property and its workings, is a fellow-servant of the other employés, and the corporation is not liable to an administratrix for the death of an employé caused

by an explosion occasioned by workmen going into a room where there is an accumulation of gas, over a danger signal, with a naked light, either by the direction of the pit boss or with him.

512 Error to the district court, Santa Fé county, before Mr. Justice N. B. Laughlin.

Actions by Josephine Deserant, administratrix, against the Cerrillos Coal Railroad Company for the death of plaintiff's intestates. From a judgment in favor of defendant, plaintiff brings error. Sustained.

Niell B. Field and Frank W. Clancy, Esqrs., for plaintiff in error.

Henry L. Waldo and Ralph E. Twitchell, Esqrs., for defendant in error.

Opinion of the Court.

This is the second time these cases have been for review. In these several actions damages are claimed by the plaintiff, as administratrix, against the defendant for the death of her husband, Henry Deserant, and her sons, Jules Deserant and Henry Deserant, Jr., by an explosion which occurred in the "White Ash mine" on Wednesday, February 27th, 1895, at about 10.45 a. m.

For the purposes of the trial, the three cases were consolidated by order of the court below and were also heard in this court in the same manner.

The declarations charge negligence in various ways, but on the trial no proof, other than circumstantial, was offered to show what was the cause of the explosion or where it began. In the language of the learned judge who wrote the opinion when this case was last before this court, "it appears that by this explosion all the employés, 23 in number, who were at the time in the fourth left entry (except those in what was called the 'plane') were killed, and therefore all evidence to show how the explosion occurred and where was its initial point is necessarily circumstantial."

Cerrillos Coal Railroad Co. *vs.* Deserant, 49 Pac., 807.

It is unnecessary for us to go into the particulars of the accident or show the workings of the mine, as they are sufficiently set out in the case of Cerrillos Coal Railroad Co. *vs.* Deserant, *supra*, heretofore reported. The only substantial difference in the evidence is that on the former trial it was testified that the body of
513 Kelly was found in the upper cross-cut, between rooms 8 and 9, and the body of Flick was found on the railroad track in room number 8, above the cross-cut, while in the present case it is shown by the testimony of Kelly, one of the witnesses for the plaintiff, that the bodies of Kelly, Flick, and Donohue were found within a few feet of each other.

The theory of the prosecution as to the cause of the explosion is the same now as then, to wit, that owing to an accumulation of water previous to the explosion in a low place in the fourth left air

course a sufficient quantity of pure air was not going to the face of the workings in the fourth left entry to remove and expel the noxious gases; that Kelly and Flick, who were company men—that is, men who were paid by the day and not according to what work they did—acting under instructions from Donohue, the day pit boss, went with him or by his direction into room 8 to remove a railroad track, carrying naked lights, and that such lights set fire to the gas which had accumulated there by reason of the insufficiency of air and caused the explosion.

This theory is purely speculative and is not supported by the evidence. It cannot be positively proved what was the in-tial point of the explosion or what caused it. In fact the evidence goes to show, from measurements taken at various times by the superintendent of the mine, the pit boss, and the United States inspector, that sufficient air was going through the fourth left air course and mine to make it safe. Indeed the evidence goes further and shows that after the explosion and on the day of the investigation by the coroner's jury, and while much of the debris caused by the explosion was still in the fourth left air course, a sufficiency of air was passing through it over the water and debris through the low place, which — claimed by the plaintiff to have been obstructed by water, for the proper ventilation of the entry and its rooms and the expulsion of all harmful gases, and for the men and animals working there at the time of the explosion. There is no evidence that
514 the condition of the fourth left air course was the direct or proximate cause of the explosion, and for the plaintiff to recover this must be proved by a preponderance of the evidence.

That Flick, Kelly, and Donohue were fellow-servants of the deceased cannot be questioned. It is true that Donohue was an employé of a higher grade than either Kelly, Flick, or the deceased, but still he was a fellow-servant. This has been too often decided to need to be enlarged upon here.

A., T. & S. F. R. R. Co. *vs.* Martin, 7 N. M., 158.
Martin *vs.* A., T. & S. F. R. R. Co., 166 U. S, 399.
Alaska Mng. Co. *vs.* Whalen, 168 U. S., 86.

If, therefore, the contention of the plaintiff is true, that the explosion was caused by Kelly and Flick, by the order of Donohue, or by all three going into room number 8, where there was an accumulation of gas, with a naked light, over the danger signal (although, as before stated, that this was the cause of the explosion is purely speculative), and causing it to ignite, the plaintiff cannot recover, as the accident was the result of the negligence of a co-employé or fellow-servant. This case is governed by A., T. & S. F. R. R. Co. *vs.* Martin, 7 N. M., 158; Cerrillos Coal Railroad Co. *vs.* Deserant, 49 Pac., 807, and by a series of decisions in the United States Supreme Court undistinguishable in principle from this one.

Railroad Co. *vs.* Baugh, 149 U. S., 368.
Alaska Mng. Co. *vs.* Whalen, 168 U. S., 86, and cases there cited.

It is unnecessary for us to consider the objections urged to the instructions given by the court below. In our opinion they were all in favor of the plaintiff, as the court should have granted
515 the motion of the defendant and instructed the jury to find the defendant not guilty.

There is no error in the judgment of the court below, and it is therefore affirmed.

WILLIAM J. MILLS,
Chief Justice, etc.

We concur.
JOHN R. McFIE, *A. J.*
FRANK W. PARKER, *A. J.*
J. W. CRUMPACKER, *A. J.*
CHARLES A. LELAND, *A. J.*

December 17th, 1898.

516 TERRITORY OF NEW MEXICO, }
County of Santa Fé. }

Supreme Court.

I, clerk of the supreme court of the Territory of New Mexico, do hereby certify that the foregoing is a full, true, and perfect copy of the record of proceedings, pleadings, and opinion filed in the three causes lately pending in said supreme court, numbered 777, 778, and 779, which is transmitted to the Supreme Court of the United States in obeyance to writs of error hereto attached; and I further certify that there is in my office but one record, set of proceedings, pleadings, and opinion in said three causes.

Witness my hand and the seal of the supreme court of the Territory of New Mexico this 25th day of February, A. D. 1899.

[Seal Supreme Court, Territory of New Mexico.]

JOSÉ D. SENA,
Clerk Supreme Court of New Mexico.

(Here follows map marked p. 517.)

518 In the Supreme Court of the United States.

JOSEPHINE DESERANT, Administratrix, Plaintiff in Error, }
vs.
CERILLOS COAL RAILROAD COMPANY, Defendant in Error. }

Now comes the said appellant, by her attorney, and says to the court that there is manifest error in the record and judgment of this cause, and specifies the following as errors therein:

I.

The district court erred in overruling the objection of plaintiff in error to the question: "Then, if this explosion occurred at 10.45, state whether or not—state what at that particular time the miners

FOLD-OUT IS TOO LARGE TO BE FILMED

in the room would be engaged in" (page 132 of Transcript), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

II.

The district court erred in permitting the witness Fletcher to testify, over objection of plaintiff in error, that he had seen flame from a gunning shot extend seventy feet in the third right entry of the White Ash mine (Trans., page 134), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

III.

The district court erred in permitting the witness Fletcher to answer the question: "What effect, if any, would such a condition have upon small quantities of gas there passing in any portion of the mine or in any portion of the fourth left entry which, under ordinary conditions, would in no way be dangerous in the
519 operation of the mine?" (Trans., page 135), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

IV.

The district court erred in permitting the witness Fletcher to answer the question, "From your experience as a miner and your connection with mines which generate gas, what have you to say with reference to the possibilities of a sudden and unlooked-for appearance of gas at any place in the White Ash mine" (Transcript, page 148), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

V.

The district court erred in permitting the witness Fletcher to answer the question, "I will ask you what any two men going into room 8 and finding the brattice in that room down would have done if they had seen a danger signal lying across the track in that room" (Transcript, page 178), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

VI.

The district court erred in refusing to permit the witness Kilpatrick to answer the question, "Was there any means provided for removing that water from the 4th left air course prior to the explosion?" (Transcript, page 227), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

520

VII.

The district court erred in permitting the witness Duggan to answer the question, "With reference to the operation of coal mines of the character of the White Ash, I will ask you now whether or not you are able to state whether the stoppings in the various crosscuts were or were not of the kind accustomed to be used in mines of that character for the purpose of carrying air around to the face of the working places" (Transcript, page 347), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

VIII.

The district court erred in refusing to permit the witness Duggan to answer the question, "If such an opening were made by the fire boss under the direction of the mine foreman, should it have been reported to you?" (Transcript, page 374), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

IX.

The district court erred in refusing to permit the witness Duggan to answer the question, "Unless that had been done it would have been impossible to go into the mine, would it not, Mr. Duggan?" (Transcript, page 378), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

X.

The district court erred in refusing to permit the witness Duggan to answer the question, "And the fact of the business is, Mr. Duggan, that you don't know anything about this, and that you are trying to speculate, theorize upon some theory that would result in releasing the defendant company from liability, is that not
521 so?" (Transcript, page 387), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XI.

The district court erred in refusing to instruct the jury at the close of the evidence that the defendant was guilty of negligence, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XII.

The district court erred in refusing to take the case from the jury and find the facts when both parties asked for peremptory instructions, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XIII.

The district court erred in submitting to the jury anything except the question of damages, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XIV.

The district court erred in giving instruction number 1 asked by the defendant as follows: "The jury are instructed that what was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine that were obvious or might with reasonable diligence have become known, and in the absence of evidence to the contrary it is presumed that the defendant performed its entire duty towards the miners in that respect" (Trans., page 481), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

522 XV.

The district court erred in giving instruction No. 6 asked by the defendant as follows, to wit: "Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room 8 for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room 8, and further believe from the evidence that signals of the kind described in the evidence warning against entry into said room were placed in such manner as to be observed by the deceased, Flick, and Kelly, and the meaning and significance of such signal was understood by them, and such signal was known to be in use by the miners engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantity, then, if the jury believe from the evidence that such explosion was caused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in its favor" (Trans., page- 481-'2), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XXVI.

The district court erred in giving instruction No. 10 asked by the defendant as follows, to wit: "The burden of showing negligence on the part of the defendant that caused the death of the persons for which this action is brought is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air course through which that portion of the mine was ventilated. The presumption is that the mine was properly and
523 sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find

not only a partial obstruction of the air course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony the jury believe that, notwithstanding the partial obstruction, there still was space enough in the air course unobstructed to allow the proper and sufficient ventilation of the mine and of the fourth left entry where such deceased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons" (Transcript, page 482–'3), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XVII.

The district court erred in giving instruction No. 11 asked by the defendant as follows, to wit: "If the jury shall believe from the evidence that the defendant permitted fire-gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly, or either of them, by going into said room with a naked light (contrary to the rules and orders of the defendant), and by such naked light the fire-gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion — caused by the act of the fellow-servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor, and a verdict should be rendered for the defendant" (Transcript, page 483), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

524

XVIII.

The district court erred in failing to instruct the jury that if Flick and Kelly went into room eight in company with or under the direction of the mine foreman, Donahoe, without any knowledge of the existence in said room of a dangerous body of gas at the time of going in, and that at the time of the explosion Flick and Kelly were using due care to avoid accident, the defendant was liable, notwithstanding the explosion may have been directly occasioned by the act of Flick and Kelly (Trans., page 494), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XIX.

The district court erred in its charge to the jury by ignoring the fact that there was evidence tending to show that Donahoe's body was found in room eight in close proximity to the bodies of Flick and Kelly, and also the fact that from this evidence the jury had a right to infer that Donahoe ignited the gas, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XX.

The district court erred in overruling the motions for new trials, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

525

XXI.

The supreme court of New Mexico erred in affirming the judgment of the district court.

XXII.

The supreme court of New Mexico erred in its statement in its opinion that the theory of the prosecution as to the cause of the explosion was that owing to an accumulation of water in a low place in the fourth left air course a sufficient quantity of pure air was not going to the face of the workings in the fourth left entry to remove and expel the noxious gases, and that Kelly and Flick with naked lights set fire to the gas which had accumulated by reason of the insufficiency of air.

XXIII.

The supreme court of New Mexico erred in its statement that, from measurements taken at various times, sufficient air was going through the mine, as the measurements were all taken at times long before the explosion and showed a diminishing supply of air.

XXIV.

The supreme court of New Mexico erred in its opinion where it states that at the time of the investigation by the coroner's jury a sufficiency of air was passing through the fourth left air course, as that fact was immaterial, and the evidence showed that at the time the mine was idle and a large part of the water had been removed after the explosion.

XXV.

The supreme court of New Mexico erred in its opinion where it states that there is no evidence that the condition of the fourth left air course was the proximate cause of the explosion.

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XXVI.

The supreme court of New Mexico erred in its opinion where it holds that for plaintiff to recover it must be proved that the condition of the fourth left air course was the proximate cause of the explosion.

XXVII.

The supreme court of New Mexico erred in its opinion where it states that plaintiff's contention was that the explosion was caused by Kelly and Flick, by the order of Donahue, or by all three, going into room number 8 with a naked light over the danger signal.

XXVIII.

The supreme court of New Mexico erred in its opinion where it declares that if the explosion was caused by Kelly and Flick, by the order of Donahue, going into room No. 8 with a naked light and igniting the gas, the accident was the result of the negligence of a fellow-servant, and therefore plaintiff could not recover.

XXIX.

The supreme court of New Mexico erred in its opinion where it holds that the district court should have instructed the jury to find the defendant not guilty.

Wherefore appellant prays that the judgment of the court below be reversed, vacated, and set aside and this cause remanded with directions to grant a new trial.

NEILL B. FIELD,
F. W. CLANCY,
Attorneys for Plaintiff in Error.

527 [Endorsed:] Josephine Deserant, administratrix, &c., *vs.* Cerrillos Coal Railroad Company. Assignment of errors.

Endorsed on cover: File No., 17,376. New Mexico Territory supreme court. Term No., 269. Josephine Deserant, administratrix of the estates of Henri Deserant, Jules Deserant, and Henri Deserant, Jr., plaintiff in error, *vs.* Cerillos Coal Railroad Company. Filed April 22d, 1899.

IN THE

Supreme Court of the United States.

OCTOBER TERM, 1899.

No. 269.

JOSEPHINE DESERANT, ADMINISTRATOR OF HENRI DESERANT, JULES DESERANT, AND HENRI DESERANT, JR.,
Plaintiff in Error,
vs.
CERRILLOS COAL RAILROAD COMPANY.

BRIEF FOR PLAINTIFF IN ERROR.

STATEMENT OF THE CASE.

The statutes of the Territory of New Mexico contain the following:

> Sec. 3214. Whenever the death of a person shall be caused by the wrongful act, neglect or default of another, although such death shall have been caused under such circumstances as amount in law to a felony, and the act, or neglect, or default, is such as would, if death had not ensued, have entitled the party injured to maintain an action

and recover damages in respect thereof, then, and in every such case, the person who, or the corporation which, would have been liable if death had not ensued, shall be liable to an action for damages, notwithstanding the death of the person injured.

Sec. 3215. Every such action as mentioned in the next preceding section shall be brought by and in the name or names of the personal representative or representatives of such deceased person, and the jury in every such action may give such damages, compensatory and exemplary, as they shall deem fair and just, taking into consideration the pecuniary injury or injuries resulting from such death to the surviving party or parties entitled to the judgment or any interest therein recovered in such action, and and also having regard fo the mitigating or aggravating circumstances attending such wrongful act, neglect or default. The proceeds of any judgment obtained in any such action shall not be liable for any debt of the deceased. Provided, he or she shall have left a husband, wife, child, father, mother, brother, sister, or child or children of the deceased child, but shall be distributed as follows:

First—If there be a surviving husband or wife, and no child, then to such husband or wife; if there be a surviving husband or wife and a child or children or grandchildren, then equally to each, the grandchild or grandchildren taking by right of representation; if there be no husband or wife, but a child or children, or grandchild or grandchildren, then to such child or children and grandchild or grandchildren by right of representation; if there be no child or grandchild, then to a surviving brother or sister, or brothers and sisters, if there be any; if there be none of the kindred hereinbefore named, then the proceeds of such

judgment shall be disposed of in the manner authorized by law for the disposition of the personal property of deceased persons.

Comp. Laws of N. M., 1897, p. 810.

Under the provisions of this statute plaintiff in error instituted three actions in the district court of Santa Fe county, New Mexico, against the defendant in error, seeking to recover damages for the death of Henri Deserant, Jules Deserant and Henri Deserant, Jr., who had been employed as coal miners in the White Ash mine, situated in Santa Fe county, New Mexico, and who were killed by an explosion which occurred in said mine on Wednesday, February 27th, 1895, about ten forty-five o'clock in the forenoon.

Henri Deserant, who, at the time of his death was fifty-three years of age, was the husband of the plaintiff in error, and the father of Jules, who was fifteen years old, and of Henri, Jr., who was seventeen years old.

The declaration in each case contained five counts and for the purpose of this statement it seems only necessary to say the sufficiency of the allegations of the declaration has at no time been questioned.

Plaintiff in error relied upon specific acts of negligence, all of which are clearly within the issues of the case as made by the pleadings.

The defendant in error was engaged in operating the mine at the time of the explosion, and had, in addition to a large number of miners and other persons necessary to the conduct of its business, the following employes whose duties are more or less fully indicated by their titles: James Duggan, Mine Superintendent; John Donahoe, Day Foreman or Pit-Boss; (Donahoe was killed by the explosion); William Kilpatrick, Night Foreman or Pit-Boss; John

Deighton, Day Fire-Boss; J. W. Ray, Night Fire-Boss.

There were also "rope-riders," "mule-drivers," and "track-men;" and others, known as "company men," who were distinguished from the miners by the fact that they were paid by the day and worked under the orders and immediate supervision of the Foreman or Pit-Boss, while the miners or coal-diggers were paid by the ton and were subject only to general supervision by the foreman.

Defendant in error also had a mine inspector, Joseph Fletcher, who lived at Topeka, Kansas, and visited this, and other mines owned by it, periodically, for the purpose of inspecting and looking to the safety of the property.

The principal excavation of the mine, called the main slope, had been at the time of the explosion, excavated a distance of about twenty-nine hundred feet into the earth at an angle of about fourteen degrees from a horizontal, and excavations called "entries" were made from the main slope at intervals of about three hundred feet. There were seven of these entries on each side of the main slope, and the explosion took place in the fourth entry on the left side of the main slope, called by the witnesses "the fourth left entry."

Along and nearly at right angles to these entries, and on their upper side, working places called rooms were excavated. The openings into the rooms were started ten feet in width but, at a distance of about twenty feet from the entry, were made twenty feet wide, and were carried a distance of about three hundred feet up the vein of coal, or back towards the surface. The narrower portion at the beginning of the room is known as the "neck of the room."

The business of the miners was to remove the coal

in these rooms, load it on cars which ran on iron tracks, and bring it down out of the so-called rooms to the entry. It was there taken in charge by a mule-driver who with his mule-team hauled the car through the entry to the main slope, where it was attached to the "rope" by the "rope-rider," and was taken thence to the surface by a hoisting engine.

A twenty-foot body of solid coal was left between each of the rooms and openings, called "cross-cuts," were made to connect the rooms for purposes of ventilation.

The entire duty of the miner was to mine the coal and load it in a car. This involved drilling holes "into the solid," preparing the cartridge and putting it in place, tamping the hole and firing the cartridge at the regular firing time fixed by the company. The hours for firing were fixed, and any miner firing a shot at other than the times fixed was subject to discharge. The firing hours were, on the day shift, in rooms, twelve o'clock and five o'clock, and in the entries, nine, twelve, three and five o'clock.

The mine was ventilated by means of an exhaust fan, and to accomplish this method of ventilation what are known as slope air-courses or parallel air-courses were excavated on each side of the main slope and distant therefrom forty feet, and each of the entries had a parallel air course excavated in like manner at a distance of thirty feet below the entry.

The plan of ventilation contemplated that the exhaust fan, situated at a point on the surface where these parallel air-courses, after being connected together, could be operated upon by it, would cause the air to rush into the main slope, go thence to the bottom, where it would separate or divide and go to each side of the mine and traverse every working place in the mine, and that it would return to the

outer air at the fan, having gathered all the impurities and noxious gases in the mine.

In such a mine as this, and with such a method of ventilation as was here used, as the work progresses, the parallel air slopes, one on each side of the main slope, are driven, at a distance of about forty feet from the main slope. These air slopes or air-courses, are intended to afford channels for the return of the air to the surface. When the main slope has progressed so far that a circulation of air is necessary, an opening, known as a cross-cut, or break-through, is made from the main slope into the parallel air slope. The fan, pulling on the air slope, then draws the air down the main slope until it reaches the cross-cut, through which it rushes and returns to the surface through the air course. When the slope has been driven so far beyond the first cross-cut, or break-through, that the latter no longer serves its useful purpose of ventilating the working place, another cross-cut is made, and the first is stopped with boards or planks let into the coal on each side, near the middle of the cross-cut, and the spaces between the planks and slopes on each side, are filled with the refuse and waste of the mine. None of the stoppings are absolutely air-tight. When the slope has gone so far that the second cross-cut no longer is sufficient, that one is closed and another made. Substantially the same course is pursued in driving the entries on each side of the main slope. Each main entry has its corresponding air-course, sometimes called by the miners the back entry, driven below and parallel to the main entry, with cross-cuts or break-throughs to permit the circulation of the air necessary to life, and to the expelling of dangerous gases.

Now it is obvious that when the main slope or an entry progresses to a considerable distance beyond

the last open "cross-cut" and before the next one is made there will be a necessity of making the air go beyond that last cross-cut and up to the face of the main slope or entry where men are at work in the coal. In order to do this, canvas curtains, known to the miners as "brattice," are used. From the side of the main slope, or air-course, parallel to an entry, and a little above, or nearer the air than the last open cross-cut, heavy canvass is hung, perhaps half way across the slope or air-course, and then turned so as to follow the direction of the slope or air-course up to within a short distance of the working. The air, obstructed by this canvas in its effort to get to the open cross-cut and take the shortest course back to the fan, is guided by the canvas to its end, around which it rushes and back to the open cross-cut.

If a main entry, as in the case of the "fourth left" in this mine, is driven more rapidly than the accompanying air-course, the air coming up through the last cross-cut, would be turned in like manner by canvas or brattice and guided up to the face of the working.

In driving the "rooms" up from each main entry, in the coal, the same method is pursued. As each successive room is driven, cross-cuts are made back into the next preceding room. In this mine there appear to have been in each room not less than two such cross-cuts, when the rooms were driven up their full length. In order to prevent the return of the air back along the main entries, after it comes up from the air course or back entry, through the last cross-cut, heavy canvass curtains are hung across the main entries, which are not fastened at at the bottom, but are loose so as to permit the passage of mules or men.

It must not be supposed, however, that the air slopes, parallel to the main slope, are allowed to re-

main open for the return of the air after entries are driven on either side of the main slope. It will be apparent that if they were left open, the air, seeking the shortest course back to the fan, would never get to the working-places in the various entries and rooms. Theoretically, the air is intended to travel in one body on each side of the mine, except in a few places where it is "split," and to visit each working place. Practically, a very large percentage of the air leaks through the stoppings, or escapes through the doors as they are opened from time to time to permit the passage of men, mules and cars. This loss is shown by the air measurements on page 163 of the printed record. At page 68 of the printed record the witness, Fletcher, and at pages 169-70, the witness, Duggan, give detailed descriptions of course of the air through the left side of the mine, which may be intelligible by reference to the plat which accompanies the record.

All of the "slopes," "entries," "air-courses" and "rooms" in this mine were of the height of the coal, which was between five and six feet in thickness.

The fourth left air-course of the mine, that is, the air-course parallel to, and below, the fourth left entry, was driven through a swamp and had a sag, or low place, from two to three hundred feet in length, and there was a siphon pipe placed in it for the purpose of taking the water, which accumulated there, down to the bottom of the mine, from which place it was taken to the surface in water cars drawn up by the hoisting engine.

The fourth left entry was excavated a distance of 1,650 feet from the main slope. The fourth left air-course was 125 feet shorter than the entry.

The siphon pipe in the fourth left air-course did not work automatically, but required to be started by

hand. No witness was produced who had seen the siphon pipe working within a month before the explosion.

As soon after the explosion as men could go into the fourth left air-course, it was found to be practically full of water. The dimensions of the air-course, as fixed by the mine inspector, Fletcher, were six feet high and nine feet wide, with a slope from the upper to the lower side of from twelve to fourteen degrees. The water was within three inches of the top on the low side when the coroner's jury went into the mine four or five days after the explosion, although the hoisting engine had been working night and day hauling water during all the time between the explosion and the going down of the coroner's jury.

This body of water lay from two hundred to three hundred feet along the air-course.

There were eighteen rooms excavated along and above the fourth left entry, and the last cross-cut or opening between the fourth left air-course and the fourth left entry was necessarily more than 125 feet from the face of the entry, by which is meant the farthest point of excavation. The exact distance of the last cross-cut from the face of the entry does not appear.

The air was carried through this last cross-cut and thence along the entry to the face by means of a curtain called the "brattice," which extended to within fifteen feet of the face. The air passed around this curtain and came back on the other side of it to room 18 and went then to the various rooms and working places on that entry to room 6 where there was a break-through to the third left air course, and part of the air went from room 6 to the men working on the "plane" of the fourth left entry and from

there to the third left air-course through room 1 of the fourth left entry, while the remainder went through the break-through in room 6 up to the third left air-course and to the working places on the third left entry and so on to the fan. What is meant by the "plane" on the fourth left entry will be readily understood by an inspection of the map attached to the transcript. Between the points No. 3 L and No. 4 L on the map are shown excavations marked 1, 2 and 3. These constitute the "plane" of the fourth left entry and the black line entering at 1 and passing around the face of the "plane" and cut at 3 indicates the course of the air through the "plane."

Just above No. 4 L on the map is shown an obstruction in the passage called the "upraise." It is here that the board was knocked off a short time before the explosion to let air in to the men on the "plane," by which is meant a working place in the entry driven back towards the slope thus:

When a main entry is begun, it diverges at an acute angle from the main slope, going down in the coal for a short distance, and then turns to a direction nearly at right angles with the main slope, and is continued as far as is practicable or profitable. Track is laid from the main slope into the entry, and at a sufficient distance from the main slope to give space for a train, or in miners phrase, "a trip" of cars to stand, between the door, and the main slope, a door is placed for the purpose of preventing the passage of air from the main slope into the entry and thus injuriously affecting the circulation. A short distance beyond this door the first room is "turned," and driven back up the vein of coal. From this first room, numbered one on the entry, rooms are excavated back toward the main slope and the space between the number one room and the main

slope is called the "plane," and the rooms between the number one room on the entry and the main slope are called the rooms on the plane.

It should be borne in mind that these parallel air-courses furnished the temporary as well as permanent system of ventilation for the mine and that it became necessary, as the work of excavation progressed, to connect the slope or entry and its air-course by means of what are called break-throughs, which break-throughs in turn, as further progress was made, were filled up by means of what are called stoppings, and the sufficiency of the ventilating system depended to some extent upon the character of these stoppings. It is not contended that this explosion was caused by the character of the stoppings in use in the mine, but the facts that they were not air-tight and that air leaked through them, are circumstances of importance in the case; circumstances which, taken in connection with the other circumstances in the case, conclusively establish the theory of plaintiff in error as to the cause of this explosion. That theory is that the explosion was caused by the accumulation of a large body of water in the fourth left air-course which so interrupted the circulation of air in the fourth left entry that the insufficient quantity of air passing into room 8 of that entry did not go to the face of that room, but feebly passed around the brattice at a distance of twelve or firteen feet from the face, thus permitting the accumulation of a dangerous body of gas at the face of room 8 which continually increased until it passed beyond any danger signals which may have been put in the room by the fire bosses, and that Donahoe, Flick and Kelly entered the room on the morning of the exposion with naked lamps and ignited the gas before they saw or had an opportunity to see the danger signal. The death of these three

men was instantaneous, as if caused by a flash of lightning, and they entered the room through the cross-cut from room No. 9 and met the gas where Flick fell, he being further up the room than the others.

This was opposite the cross-cut by which they entered and certainly seventy feet from the face of the room. The fact that the air was not going to the face of room 8 of the fourth left entry at the time of the explosion is shown by the undisputed circumstances that there was no indication of flame at the face of that room nor within fifteen feet of the face.

It is, however, insisted on behalf of defendant in error that there would have been no air on the third left entry, unless it had first passed the face of room 8, and it is in this aspect of the case that the sufficiency of the stoppings and other ventilating appliances of the mine become important.

The contention that all the air in the third left entry had to pass the face of room 8 of the fourth left entry is completely overthrown by these undisputed facts:

> First—The slope leaked more than 60 per cent of the air before the air reached the bottom of it.
>
> Second—A large part of this air necessarily escaped through the doors and stoppings into the entries and parallel air-courses and after leaving the slope sought the shortest route to the fan.
>
> Third—Two weeks before the explosion an opening had been made through the stopping of an upper air-course to let the air go to the men on the plane of the fourth left entry, and this air, after leaving the plane, went through No. 1 room on the fourth left entry into the air-course of the third left entry without having passed

beyond room No. 1 of the fourth left entry at all.

Fourth—If there had been no obstruction in the fourth left air-course there would have been no occasion to open a stopping to allow the air from the upper air-course to pass to the men on the plane of the fourth left entry.

The evidence establishes beyond a reasonable doubt that the obstruction by water of the fourth left air-course and the accumulation of the gas in room 8 of the fourth left entry combined to cause this awful calamity and that the Mine Foremen and Fire Bosses knew of the existence of these dangers while the unfortunate victims had no knowledge or means of knowledge of their existence.

At the time of the explosion twenty-three men who were at work in the fourth left entry of that mine were killed by concussion; a man and a pair of mules in the third left entry were killed by "afterdamp," and four men who were at work on the plane of the fourth left entry came out uninjured. Fonr men who were working in rooms 14 and 15 of the third left entry were imprisoned in the mine for several hours by "afterdamp" which they encountered in both the entry and air-course of that entry, the same "afterdamp" which killed the two mules and their driver in the third left entry. These men were finally rescued.

Within two months before this explosion a double shift of men had been put to work in the mine, which means that the mine worked night and day. The ordinary daily routine of inspection of the mine, so far as it is material, was as follows:

There was a day fire-boss who inspected the mine for gas before the day shift went to work and a night fire-boss who did the same thing before the night

shift went to work. At the conclusion of his inspection, the fire-boss would take his position at what was known as the "Fire-Boss' Cabin" within the main slope near the mouth, and would advise each miner when he came in, as to the condition of his working-place.

No miner was permitted to go into the mine to work until advised by the fire boss that his place was safe.

If there was a very small quantity of gas in a miner's place and the miner was an expeaienced man, the fire boss would sometimes give him a safety lamp and tell him there was a little gas in his place; but if there was enough gas to be at all dangerous, he would tell the miner to wait at the switch for him, and he, the fire boss, would go down and get the gas out and see to the air before the miner was allowed to work. No miner had knowledge or means of knowledge as to the condition of the mine at other places than where he performed his work, and he relied on the fire boss to inspect the mine and advise him as to its safety.

This gas is explosive only when mixed in certain proportions with atmospheric air. It is lighter than air and is dispelled and carried off by a moving current of air whenever it encounters it, so that getting gas out simply means passing a current of air through the particular place where gas is found,

To make an inspection and visit the working places as they were at the time of the explosion, required the fire boss to travel four miles and 2060 feet under ground. The day fire boss went to work at from two to three-thirty o'clock in the morning and was usually back at the fire boss' cabin a little before seven o'clock. The night shift was at work in the mine while the day fire boss was making his inspection, and shots were fired by the night shift in many

places after the day fire boss had passed, and there was no further inspection of those places by any person between the firing of the last shot by the night shift at about five o'clock in the morning and the going to work of the day shift at about seven o'clock.

The fire bosses both testified that they had more work than they could properly attend to, and that the day foreman within a few days before the explosion had promised each of them an assistant to help hang canvass, but did not supply an assistant to either as promised. *(Trans. pp. 34, 144.)*

On Sunday night before the explosion the excavation of coal in room 8 of the fourth left entry was finished, but the track in the room had not been removed at the time of the explosion. On that Sunday night Kilpatrick, the night foreman, found two men working in that room with a safety-lamp. He took the lamp and tried the room for gas and found enough to fill the safety lamp and explode in it. He did not return to the room until after the explosion. *(Trans. 122-3.)*

He had no further duty with reference to the room without special orders from Donahoe. *(Trans. 125-6.)*

On Monday morning, before the explosion on Wednesday, Deighton, the day fire boss, found a body of gas in room 8 of the fourth left entry, and put a danger mark on a tie above the last cross-cut in the room. *(Trans. p. 132.)*

He did not go back there before the explosion, although room 8 was one of the worst rooms for gas, and he knew it was his duty to go back and remove the gas. *(Trans. p. 143.)*

He reported the gas to the foreman Donahoe. *(Trans. p. 147.)*

On Monday night before the explosion, Ray, the night fire boss, was at the face of room 8 in the

fourth left entry. He found no fire-mark or danger signal such as Deighton says he placed there on Sunday night, but he did find a body of gas extending back ten or eleven feet from the face of the room and he put fire marks in the room, one above the cross-cut in room eight and one below the cross-cut on the right. *(Trans. p. 36.)*

He did not visit the fire-mark in room 8 between Monday night and the explosion and did not remove the gas because there was nobody working there and he was crowed with his work. He told Donahoe that there was a little more gas than usual in room 8 Monday night. *(Trans. p. 37.)*

The fire boss, Ray, testified that it was his duty, after he discovered the gas in room 8, to carry the brattice near enough up to the face to cause air to carry the gas out, but he never had time to do it; that he marked room 8 because he knew that the air would not carry the gas out without a change of the brattice; that when he reported the gas to Donahoe he and everybody else relied upon the fact that Donahoe would not send anybody into that room with a naked light until after the gas was removed; that the way that mine was run he was not compelled to go back to room 8 after he put the fire-mark there; that when he discovered the gas and put the fire-mark, he had not exactly done his duty but had done it as far as he could. *(Trans. p. 70.)*

The fire boss, Deighton, testified as follows:

Q. Would it have been your duty to go back and look at it? (The fire mark).
A. Yes.
Q. When?
A. Any time.
Q. Wasn't it your duty to go back the next day, and don't you know it was?
A. Well, it was an abandoned room and

I had the necessary mark up there.

Q. Answer the question. Don't you know that it was your duty to go back to that fire-mark the next day?

A. Yes, sir.

Q. And every day until that gas was removed?

A. Yes, sir.

Q. And don't you know it was your duty to remove that gas?

A. If I could.

Q. You could, couldn't you?

A. No sir.

Q. No appliances in that mine whereby you could have removed that gas from there?

A. No, sir; I don't know if there was.

Q. As you understand your duty in that mine you had no right to remove that gas until somebody authorized you to do it?

A. No, I meant that I could not get it out, it was so far away from the cross-cut and I had no authority to put in a cross-cut through to No. 9 room and drive it out of 8.

(Transcript, p. 144.)

After the explosion, the bodies of Donahoe, mine foreman, and Flick and Kelly, two company men, were found in room No. 8. Kelly's body was at the corner of the last cross-cut and the body of Flick opposite the cross-cut. *(Trans. page 140).* Donahoe's body was about five feet from the body of Kelly. *(Trans. p. 243).* All three had the ordinary miners' lamps in their caps. The tools used by them in taking up track were in the room.

From these circumstances the inference is irresistible that Flick and Kelly went with Donahoe, under whose direction they worked, into room 8 with naked lights, and that the explosion was caused by the gas in the room coming in contact with one of those lights.

Deighton was one of the first to go into room 8 after the explosion and he found no fire mark there. *(Trans. p. 140).*

Fletcher did find a tie with a danger mark on it fifty or sixty feet above the cross-cut toward the face of the room. *(Trans. page 74).*

Fire marks or danger signals consisted of a cross or two crosses and the date and initials of the fire boss written with white chalk upon a tie or a shovel thrown down on the track.

It will be observed that while the fire boss, Ray, went into room 8 after Deighton had been there and had put his mark in the room, he failed to see the mark which Deighton says he put there, and also that Deighton, after the explosion, failed to find the mark which Ray says he put there on Monday night before the explosion, while Fletcher found such a mark in the room on the day when he went down with the coroner's jury, but the place where Fletcher says he saw the danger mark was fifty or sixty feet above the cross-cut, and therefore at least fifty feet further up the room than where either body was found, which shows that the gas had crossed the fire mark and had come down the room so far that it was ignited before the men had any chance to see the mark.

Kilpatrick found a tie with a fire mark on it almost in front of and a little below the cross-cut when he went into the room after the explosion. It had the initials W. R. and the date. *(Trans. p. 115.)*

Kilpatrick only went as far as the top cross-cut of room eight on this occasion. *(Trans. p. 114.)*

He went from the neck of the room on the main entry straight up the room and did not go through the cross-cut at all. *(Trans. p. 126-7.)*

The tie which Kilpatrick found below the cross-cut is undoubtedly the tie which Ray says he placed below the cross-cut on Monday night before the explosion. *(Trans. p. 63.)*

The evidence conclusively establishes that the explosion was caused by the ignition of gas in room 8 of the fourth left entry of the mine. The theory of a powder explosion is wholly unsupportable. There was no sound such as would have been produced by an explosion of powder. The same is true of the theory of an explosion caused by a gunning shot. No witness testified to having heard a report such as would be caused by a gunning shot, and witness Beck testifies that he had heard the shots at nine o'clock on the morning of the explosion and that he heard no other after the nine o'clock firing; that if there had been any shot fired in the fourth left entry, or in any of those rooms, he would have heard it, and that there was not at the time of the explosion any noise or report such as accompanies the explosion of gunpowder. *(Trans. p. 48.)*

There were some powder cans found which had evidently been rent open by explosion, but there were unexploded powder cans and a cartridge made up ready to be used which were not exploded.

Miners' dinner-buckets, coats and mine boxes were, in some places, undisturbed, while in one of the rooms a drilling machine was still in an upright position, and that was in a room adjoining the one in which, according to the testimony of Fletcher, the greatest evidences of violence were found.

After the accident everything pointed to a gas explosion originating in room 8. All witnesses, on both sides, agreed that a gas explosion always travels against the air; that is, that it expends its force in the direction from which the air is coming.

There is no evidence of explosion in the mine ~~above~~ below the fourth left air-course nor above or beyond room 8 in the fourth left entry. There was no evidence of flame within fifteen feet of the face of room 8, and there was evidence of flame in the other direction all the way around, through all the rooms and entry, to the water in the fourth left air-course. This is a demonstration of two things: First, that the explosion started in room 8, and, second, that the air was not going to the face of room 8.

A boy whose business it was to open and close the door going from the main slope into the fourth left entry, was blown through the door and out toward the ~~slope a distance~~ of not less than seventy feet. There is no theory upon which the injury to this boy can be explained under the evidence, except that the force of the explosion came in contact with the body of water in the fourfh left air-course, which body of water was sufficient to stop it and cause it to rebound, and the force of the explosion on the rebound, of course, found escape at the point of least resistance, to-wit, the door.

We assert that there is no conflict between the witnesses as to the following facts:

I.

There was a body of water in the fourth left air-course of the mine which lay along the air-course from two hundred to three hundred feet and extended certainly to within three inches of the top on the low side.

II.

This body of water was known to exist by Donahoe and both fire bosses. Its existence was not known to plaintiff's intestates and the other coal miners working in the mine.

III.

This body of water was allowed to accumulate in that particular place in the mine because the appliances were not sufficient to take out all the coal produced and to keep the mine free from water.

IV.

On Sunday night, before the explosion on Wednesday, the night foreman, Kilpatrick, discovered gas in room 8 of the fourth left entry and made no effort to get it out, nor did he return to the room before the explosion.

V.

On Monday morning, before the explosion on Wednesday, the day fire boss found a body of gas in room 8 of the fourth left entry and markod the room with a danger mark on a tie above the last cross-cut in the room, and did not return to the room until after the explosion.

VI.

On Monday night, before the explosion on Wednesday, the night fire boss discovered a dangerous body of gas in room 8 of the fourth left entry, but did not see the danger mark placed there by the day fire boss. This gas then extended entirely across the face of the room and down ten or eleven feet from the face. He put fire marks in the room, one above, and one below, the last cross-cut, and did not return to the room untii after the explosion, although he knew it was his duty to return and remove the gas.

VII.

Fletcher, the mine inspector, *(Trans. 85-6)*, and Duggan, the superintendent, *(Trans. 192-4-5)*, both testified that the

water in the air-course and the gas in room 8 should have been removed.

It is something more than a coincidence that, within two months before the explosion, the foremen and fire bosses in the mine were changed, and that four men were employed for these positions, no one of whom had ever filled a similar position.

Donahoe was appointed day foreman less thon two months before the explosion. *(Trans. p. 177)*. He had never been foreman in a mine before his appointment. *(Trans. p. 200)*.

Kilpatrick was appointed night foreman six or seven weeks before the explosion. *(Trans. p. 104)*. He had never been foreman in a mine before. *(Trans. p. 90)*.

Deighton was employed as fire boss about January 1st, 1895. *(Trans. p. 131)*. He had never been fire boss in a mine before. *(Trans. pp. 142-3)*.

Ray was employed as fire boss about January 1st, 1895. *(Trans. p. 35)*. He had been assistant fire boss in the Indian Territory for five or six months once, but had never been fire boss in a mine until he was appointed to that position in the White Ash Mine.

Duggan had been superintendent of the White Ash Mine about one year and nine months at the time of the explosion. *(Trans. p. 169)*. At the time of his appointment he had been underground in coal mines only as much as six or eight hours in his life. He had not been under ground in a coal mine for seven or eight years. He had never been a mine superintendent, and was practically without experience in any kind of mining, except that he was familiar with mining machinery and understood operating a diamond drill. *(Trans. p. 189)*.

The employes of the defendant in error signed a book which was kept in the Company's office and was

known as the contract, *(Trans. p. 210)*, in which it is set out:—

> " * * * In order that there may be a full and complete understanding between the company and its employes, the following rules and regulations are hereby agreed to, and adopted by the company, for the government of its mines. Its superintendent and other officers are hereby commanded to enforce them in such a manner as to secure equal justice to all concerned."

Among the rules are the following:

> "No. 3. No person or persons whether employed by the company or not, will be permitted to dictate who shall be employed or discharged or to interfere in any way or manner in such matters. The company has secured the services of experienced mining superintendents, who will deal justly with men employed, who will give gentlemanly treatment to all, and expect the same in return." *(Trans. page 211.)*
>
> "No. 17. All employes are requested to report any unsafe place to the mine boss who shall at once have the same repaired and permit no one to enter therein until it is put in proper condition. Reckless persons, or those having no knowledge of mining, will not be permitted in the mine. The mine boss will personally examine the mine and know all parts thereof are in safe condition." *(Trans. p. 213.)*

An act of Congress in force at the time of this explosion contains the following:

> "Sec. 6. That the owners or managers of every coal mine at a depth of one hundred feet or more shall provide an adequate amount of ventilation of not less than fifty-five cubic feet of pure air per second or thirty-three hundred cubic feet per minute for every fifty men at work in said mine, and in like proportion for a greater number,

> which air shall by proper appliances or machinery be forced through such mine to the face of each and every working place, so as to dilute and render harmless and expel therefrom the noxious or poisonous gases; and all workings shall be kept clear of standing gas." *(1st Supp. Rev. Statutes, 948).*

At the trial the mine inspector, Fletcher, was permitted over objection, to answer certain questions which are made the subject of the first five assignments of error. The court also refused to permit counsel for plaintiff in error to ask certain questions of the witnesses, Kilpatrick and Duggan, and these are made the subject of the 6th, 8th, 9th and 10th assignments of error. Duggan was permitted, over objection, to testify as to the kinds of stoppings customarily used in coal mines, and this is made the subject of the 7th assignment of error.

This case has been twice reviewed by the supreme court of the Territory of New Mexico. On the first occasion that court distinctly held that the fire bosses in the discharge of their duties, inspecting the mine for gas, represented the Company and that the Company was chargeable for their neglect. The case was reversed, however, upon the theory that there was evidence from which the jury might have inferred that the intestates of plaintiff in error assumed the risk of standing gas in the mine. The court said:

> "The rule adopted in The White Ash mine, of the fire boss making rounds of inspection, and advising miners as they went to work, of the condition of their places as to safety, and the fact that all employes well understood that danger signals were used in the mine to prevent entrance into particular places of rooms, pre-supposed that deceased

> and his co-employes knew that work was and might be carried on without cessation, though there might be standing gas in places or rooms of the mine, and that they understood, when informed that their working-places were safe, that such representation did not mean there was no standing gas in the mine, or in any particular entry of the mine." *(49 Pac. 808.)*

The doctrine thus laid down had not been contended for by the counsel for the company upon the trial or in the supreme court in argument or in their brief.

On the second trial, however, plaintiff in error proved affirmatively by the witnesses, Ray, *(Trans. 26,)* Beck, *(Trans. 47,)* Hunt, *(Trans. 157,)* and McKinley, *(Trans. 166,)* that the miners working in the fourth left entry had no knowledge or means of knowledge that the fourth left air-course was obstructed by water, and also by the same witnesses that there was no rule or custom known to the miners whereby a dangerous quantity of explosive gas was permitted to accumulate in the mine and remain as long as thirty-six or forty-eight hours protected only by a fire mark.

Plaintiff in error also proved affirmatively by the fire bosses, Ray and Deighton, that none of the coal diggers who were killed in the explosion had any knowledge or means of knowledge of the fire marks in room 8 of the fourth left entry nor any business to make any inquiry in regard thereto and that the miners relied on the fire bosses for their safety and had no knowledge or means of knowledge as to how the fire bosses discharged their duties.

Upon the second review, the learned court, affirming the judgment of the court below, held that the trial judge should have sustained the motion of the

defendant in error and should have instructed the jury to find the defendant not guilty.

We are not able from the opinion to determine by just what process of reasoning this result is reached, but we do know from numerous decisions of this court that the conclusion of the supreme court of the territory is unwarranted, unless all of the evidence in the case with all of the inferences which the jury could properly draw from that evidence, would not support a verdict in favor of the plaintiff in error.

At the close of all the evidence each side moved the court to direct a verdict in its favor but the court overruled both motions and sent the case to the jury. After the verdict there was a motion for a new trial upon the ground, among others, that the verdict was against the weight of the evidence, and the trial judge, in overruling the motion, ordered it to be certified upon the record that the motion was overruled upon the ground that there was a conflict of evidence in the cases, and the court was of opinion that it had, in such a case, no discretion to set aside the verdict as against the weight of the evidence. *(Trans. p. 30).*

The state of this record has rendered it necessary, in the opinion of counsel, to specify twenty-nine grounds of error. They are as follows:

I.

The district court erred in overruling the objection of plaintiff in error to the question: "Then, if this explosion occurred at 10:45, state whether or not—state what at that particular time the miners in the room would be engaged in," *(page 72 of transcript)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

II.

The district court erred in permitting the witness Fletcher to testify, over objection of plaintiff in error,

that he had seen flame from a gunning shot extend seventy feet in the third right entry of the White Ash Mine, *(Trans. page 72)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

III.

The district court erred in permitting the witness Fletcher to answer the question: "What effect, if any, would such a condition have upon any small quantities of gas, either passing in any portion of the mine or in any portion of the fourth left entry, which, under ordinary conditions, would in no way be dangerous in the operation of ihe mine?" *(Trans. page 73)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

IV.

The district court erred in permitting the witness Fletcher to answer the question: "From your experience as a miner and your connection with mines which generate gas, what have you to say with reference to the possibilities of a sudden and unlooked-for appearance of gas at any place in the White Ash Mine?" *(Trans. page 80)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

V.

The district court erred in permitting the witness Fletcher to answer the question: "I will ask you what any two men going into room 8 and finding the brattice in that room down would have done if they had seen a danger signal lying across the track in that room?" *(Trans. page 95)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

VI.

The district court erred in refusing to permit the witness Kilpatrick to answer the question, "Was there any means provided for removing water from

the fourth left air course prior to the explosion?" *(Trans. page 121)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

VII.

The district court erred in permitting the witness, Duggan, to answer the question, "With reference to the operation of coal mines of the character of the White Ash, I will ask you now whether or not you are able to state whether the stoppings in the various cross-cuts were or were not of the kind accustomed to be used in mines of that character for the purpose of carrying air around to the face of the working places," *(Trans. p. 185)*, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

VIII.

The district court erred in refusing to permit the witness, Duggan, to answer the question, "If such an opening were made by the fire boss under the direction of the mine foreman, should it have been reported to you?" *(Trans. p. 199)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

IX.

The district court erred in refusing to permit the witness, Duggan, to answer the question, "Unless that had been done it would have been impossible to go into the mine, would it not, Mr. Duggan?" *(Trans. page 201)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

X.

The district court erred in refusing to permit the witness, Duggan, to answer the question, "And the fact of the business is, Mr. Duggan, that you don't know anything about this, and that you are trying to speculate, theorize upon some theory that would re-

sult in releasing the defendant company from liability, is that not so?" *(Trans. page 206)*; and the supreme court or New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XI.

The district court erred in refusing to instruct the jury at the close of the evidence that the defendant was guilty of negligence, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous. *(Trans. 251.)*

XII.

The district court erred in refusing to take the case from the jury and find the facts when both parties asked for peremptory instructions, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XIII.

The district court erred in submitting to the jury anything except the question of damages, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XIV.

The district court erred in giving instruction number 1 asked by the defendant as follows: "The jury are instructed that what was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine that were obvious or might with reasonable diligence have become known, and in the absence of evidence to the contrary it is presumed that the defendant performed its entire duty towards the miners in that respect," *(Trans. p. 257)*; and the

supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XV.

The district court erred in giving instruction No. 6 asked by the defendant, as follows, to-wit: "Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room 8 for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room 8, and further believe from the evidence that signals of the kind described in the evidence warning against entry into said room were placed in such manner as to be observed by the deceased Flick and Kelly, and the meaning and significance of such signal was understood by them, and such signal was known to be in use by the miners engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantity, then if the jury believe from the evidence that such explosion was caused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in its favor," *(Trans. page 258)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XVI.

The district court erred in giving instruction No. 10 asked by the defendant as follows, to-wit: "The burden of showing negligence on the part of the defendant that caused the death of the persons for which this action is brought, is upon the plaintiff, and evidence has been introduced for the purpose of showing an obstruction of the air-course through which that portion of the mine was ventilated. The presumption is that the mine was properly and sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find not only a partial obstruction of the air-course,

but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony the jury believe that, notwithstanding the partial obstruction, there still was space enough in the air-course unobstructed to allow the proper and sufficient ventilation of the mine and of the fourth left entry where such deceased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons," *(Trans. page 258)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XVII.

The district court erred in giving instruction No. 11 asked by the defendant as follows, to-wit: "If the jury shall believe from the evidence that the defendant permitted fire gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly, or either of them, by going into said room with a naked light (contrary to the rules and orders of the defendant), and by such naked light the fire gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion and injury were directly and immediately caused by the act of the fellow servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor, and a verdict should be rendered for the defendant," *(Trans. pages 258-59)*, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XVIII.

The district court erred in failing to instruct the jury that if Flick and Kelly went into room eight in company with or under the direction of the mine foreman, Donahoe, without any knowledge of the existence in said room of a dangerous body of gas at

the time of going in, and that at the time of the explosion Flick and Kelly were using due care to avoid accident, the defendant was liable, notwithstanding the explosion may have been directly occasioned by the act of Flick and Kelly *(Trans. page 260)*; and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XIX.

The district court erred in its charge to the jury by ignoring the fact that there was evidence tending to show that Donahoe's body was found in room eight in close proximity to the bodies of Flick and Kelly, and also the fact that from this evidence the jury had a right to infer that Donahoe ignited the gas, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XX.

The district court erred in overruling the motions for new trials and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XXI.

The supreme court of New Mexico erred in affirming the judgment of the district court.

XXII.

The supreme court of New Mexico erred in its statement in its opinion that the theory of the prosecution as to the cause of the explosion was that owing to an accumulation of water in a low place in the fourth left air-course a sufficient quantity of pure air was not going to the face of the workings in the fourth left entry to remove and expel the obnoxious gases, and that Kelly and Flick with naked lights set fire to the gas which had accumulated by reason of the insufficiency of air.

XXIII.

The supreme court of New Mexico erred in its statement that, from the measurements taken at vari-

ous times, sufficient air was going through the mine, as the measurements were all taken at times long before the explosion and showed a diminishing supply of air.

XXIV.

The supreme court of New Mexico erred in its opinion where it states that at the time of the investigation by the coroner's jury a sufficiency of air was passing through the fourth left air course, as that fact was immaterial, and the evidence showed that at the time the mine was idle and a large part of the water had been removed after the explosion.

XXV.

The supreme court of New Mexico erred in its opinion where it states that there is no evidence that the condition of the fourth left air course was the proximate cause of the explosion.

XXVI.

The supreme court of New Mexico erred in its opinion where it holds that for plaintiff to recover it must be proved that the condition of the fourth left air course was the proximate cause of the explosion.

XXVII.

The supreme court of New Mexico erred in its opinion where it states that plaintiff's contention was that the explosion was caused by Kelly and Flick, by the order of Donahue, or by all three, going into room number 8 with a naked light over the danger signal.

XXVIII.

The supreme court of New Mexico erred in its opinion where it declared that if the explosion was caused by Kelly and Flick, by the order of Donahoe, going into room number 8 with a naked light and igniting the gas, the accident was the result of the negligence of a fellow servant, and therefore plaintiff could not recover.

XXIX.

The supreme court of New Mexico erred in its opinion where it holds that the district court should have instructed the jury to find the defendant not guilty.

POINTS AND AUTHORITIES.

I.

The rulings of the Trial Court upon the question of evidence, which are made the subject of the first ten assignments of error, were erroneous.

It is difficult to understand the theory upon which these rulings were made. The first one allowed the witness, Fletcher, who was in Topeka, Kansas, at the time of the explosion, to testify to his speculations as to what the men in the mine were doing at the time of the accident. He showed no special knowledge on this subject and there was no effort made by the defendant in error to show from the positions of the bodies of the dead men or from other circumstances found in the mine after the explosion, how the men were actually engaged when they met their death. The question called upon the witness to speculate and in answer to it he indulged in the merest guess, which was allowed to go to the jury. *(Trans. p. 72).*

The second ruling complained of permitting the same witness to testify with reference to a gunning shot and its effect in the third right entry of the mine at some time prior to the explosion. There was absolutely no evidence in the case from which the jury might have inferred that a gunning shot

caused this explosion and the effect of this evidence must have been, as the intention clearly was, to withdraw the attention of the jury from the real issue which they were called upon to try. *(Trans. p. 72).*

The third ruling complained of permitted the same witness to testify to a theory, unsupported by any evidence, which involved the assumption that there were small quantities of gas in the mine which, under ordinary conditions, would in no way be dangerous. *(Trans. p. 73).*

The fourth ruling complained of permitted the same witness to testify that "Men drilling holes may tap gas or a certain break in the roof where gas is given off from the adjoining strata, gas is liable to appear," when there was no evidence from which the jury might infer that, at the time of this explosion, any man in the fourth left entry was engaged in drilling a hole nor was there any evidence of any break in the roof, but on the contrary the uncontradicted evidence in the case was that the fourth left entry was not liable to produce gas unexpectedly. *(Trans. page 148).* The question called upon the witness to speculate and the answer was purely speculative. *(Trans. p. 80).*

The fifth ruling at pages 95-6 of the transcript, called for more speculation on the part of the same witness, and an examination of the entire evidence of this witness will show that counsel for defendant in error was permitted to lead him and suggest to him and invite him to speculate as to the cause of this explosion, and that he never hesitated to advance the most preposterous theories whenever by so doing there appeared to be an opportunity to confuse the jury.

The sixth ruling complained of was clearly prejudicial to the plaintiff in error. The witness Kilpatrick had been permitted to testify upon his examination in

chief that every part of the mine was in good condition *(Transcript p. 111)*, and when asked upon cross examination, "Was there any means provided for removing the water from the fourth left air-course prior to the explosion?" the objection was made "That the question was improper cross-examination, nothing having been gone into with reference to the means of removing water from any part of the mine with this witness," and the court sustained the objection. *(Trans. p. 121.)* This cut plaintiff in error off from showing by this witness, that his testimony that the mine was in good condition prior to the explosion, was not true, and we certainly had the right to prove by him the existence of this fact, if it was a fact. That we were permitted to prove it by other witnesses does not cure the error because it is manifest that the sustaining of this objection, by the court, at the time it was sustained, closed the door to further cross-examination of this witness on that line.

The seventh ruling complained of relates to the testimony of the witness Duggan, who was allowed over objection to answer that the stoppings used in the White Ash mine are similar to those used in other mines when he had not shown that he had ever been in any other coal mine. *(Trans. p. 185.)* The cross-examination of this witness demonstrates the impropriety of this question because the witness shows upon cross-examination affirmatively that he had had no such experience as qualified him to express an opinion on the point involved in the question.

Upon the cross-examination of this witness the court refused to permit us to show that it was the duty of the fire-boss or of the mine foreman to report to him the fact that a certain opening had been made in one of the stoppings of the mine to let air into the

men working on the fourth left plane. It was and is the theory of plaintiff in error that the fact that such an opening had to be made was evidence of a serious obstruction in the air-course. We had proved by the witness who made the opening that it had been made under the direction of the mine foreman and we sought by this question to prove that it was a breach of duty on the part of the mine foreman or the fire-boss not to report this opening to the superintendent. We were not allowed to do so. The ground of objection which was sustained by the court as found in the record is "objected to as improper cross-examination and as being a hypothetical question based upon facts not testified to by the witness or anybody else." *(Trans. p. 199-200.)* The witness on his direct examination had testified as to the duties of the mine foreman and fire-bosses at length. On cross-examination he was asked as to this particular duty and it was proper cross-examination. It was not a hypothetical question because the witnesses Kilpatrick and Deighton both testified to such an opening having been made for the purpose indicated and this fact was not disputed. *(Trans. page 117, Trans. page 145.)*

The next ruling complained of was the refusal of the court to permit us to ask the witness Duggan the question (referring to the running of the engine night and day between the time of the explosion and investigation by the coroner's jury). "Unless that had been done it would have been impossible to go into the mine, would it not?" "Objected to as calling for an opinion of the witness and the facts speak for themselves." *(Trans. p. 201.)*

It seems to us that this was not calling for the opinion of the witness but was asking him to describe the conditions existing there.

The next and last ruling on the evidence complained of was the refusal of the court to permit us to show by the witness Duggan that he was trying to speculate and hit upon some theory which would relieve the defendant in error from liability for this explosion. It was a question which went directly to the credibility of the witness and which, if answered in the affirmative, as the truth probably required, would have justified the jury in disregarding his testimony. No ground is stated for this objection and we are left to conjecture as to the theory upon which the question was ruled out. *(Trans. p. 206.)*

The court will discover that in asking for a review of the action of the trial court, as to these rulings on evidence, we have chosen but few of the many instances in which exceptions were taken at the trial. We have made this selection with great care and confidently believe that in each one of the ten rulings complained of the trial court violated elementary rules of evidence.

New England Glass Co. vs. Lovell et al., 61 Mass. 320.
State vs. Watson, 65 Maine, 74.
State vs. Pike, 65 Maine, 115.
Elkhart Co. vs. Waldorf, 46 N. E. 88.
Railway Co. vs. Kellogg, 94 U. S. 473.
Conn. Insurance Co. vs. Lathrop, 111 U. S. 618.
Camel vs. Richards, 5 Barn. & Adolph., 840.
White vs. Balue, 90 Mass. 408.
Higgins vs. Dewey, 107 Mass. 494.

II.

There was no conflict in the evidence and the Court should have found the facts and directed a verdict in favor of plaintiff in error, submitting to the jury only the question of damages.

At the close of the evidence each party asked the court to direct a verdict. This amounted to an assertion on the part of each party, that there was no disputed question of fact for submission to the jury, and nothing in the case to deflect the legal questions arising upon the evidence. Under such circumstances the court should have directed the jury that the defendant in error was guilty of negligence, as matter of law, and should have submitted to the jury only the question of damages.

While it is usually stated that the existence or non-existence of negligence is a question of fact to be determined by the jury, courts universally, in proper cases, direct verdicts in favor of defendants upon the ground that the evidence fails to sustain the allegations of negligence. This could only be done upon the theory that the absence of negligence, in a given case, was to be determined as a question of law. Is it not equally true that the existence of negligence in a proper case may be determined as matter of lay by the court?

Beuttell vs. Magone, 157 U. S. 154.
Christie vs. Foster, 61 Fed. 551.
Merwin vs. Magone, 70 Fed. 776.
Gunther vs. Amsden, 44 N. Y. S. 982.
Mascott vs. First National Fire Ins. Co., 37 Atlantic 255.
Clason vs. Baldwin, 46 N. E. 322.
Elliot vs. Chicago, etc., R. R. Co., 150 U. S. 245.
Gardner vs. Mich. Con. R. R. Co., 150 U. S. 349.
Delaware, etc., R. R. Co., vs. Converse, 139 U. S. 469.
Roberson vs. Edelhoff, 132 U. S. 615.
North Penn. R. R. Co. vs. Comm. Bank, 123 U. S. 727.

III.

Instruction Number One given at the request of counsel for defendant in error does not correctly state the full measure of its duty to its employes.

The jury are told in this instruction that what was required of defendant in the conduct of its mining business in caring for the miners employed by and engaged in working its mine was:

"The adoption and use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine that were obvious or might with reasonable diligence have become known."

Paragraph ten of the court's charge sets forth the defendants duty in language certainly as favorable as it could claim, but this instruction necessarily neutralizes that part of the charge and is in conflict with it.

The fourth left air course as originally constructed was confessedly sufficient, if properly inspected, and kept free from obstruction. Yet, under this instruction, the obstruction of the air course by water, subsequent to its adoption, would furnish no ground for recovery. The instruction ignores the duty of inspection which rested upon defendant and in effect told the jury that if the mine of defendant was originally properly ventilated and the methods adopted by it originally were sufficient, defects subsequently arising would create no liability.

The statute required the defendant to keep its mine free from standing gas, but this instruction utterly ignores the existence of the statutory duty, and taken in connection with the other instructions given at the request of defendant, licensed the jury to substitute ~~to submit~~ its judgment for that of Congress and to decide that it would not be negligence on the part of the defendant to permit any quantity of standing

gas to accumulate in the mine provided it was marked with a fire-mark.

Sommer vs. Coal Co., 89 Fed. Rep., 56-7.

It is true that in the court's charge to the jury the duty of inspection and of keeping the mine free from standing gas was called to the attention of the jury, but if these were the "appliances and methods" to which this instruction refers, it should have been refused as being already covered by the charge of the court. It could have been asked for and given upon no other theory than that it was intended to limit and qualify what had already been said to the jury. There is no aspect of the case upon which this and the other instructions given at the request of defendant, can be defended. They are all in direct and irreconcilable conflict with the court's charge, and this particular instruction, whether it be taken as an explanation of what was said in the charge on the subject of the master's duty to the servant, or as laying down independently a rule for the guidance of the jury, was calculated to mislead the jury, because it does not state a correct rule by which to measure the master's duty to the servant. There can be no doubt that the master here owed to the deceased the positive duty to make reasonable efforts to supply a safe mine with proper appliances for ventilation, etc., in which to do the work of the master, and to make like efforts to keep the mine and the ventilating appliances in a safe condition. In order to discharge this duty it was certainly incumbent on the master to make proper inspection of these ventilating appliances, and to keep them in good order, but this is omitted from this instruction.

> A railroad corporation may be controlled by competent, watchful and prudent directors, who exercise the greatest caution in

the selection of a superintendent or general manager under whose supervision and orders its affairs and business in all of its departments, are conducted. The latter in turn may observe the same caution in the appointments of subordinates at the head of the several branches or departments of the company's service. *But the obligation still remains to provide and maintain in suitable condition the machinery and apparatvs to be used by its employes*, an obligation the more important and the degree of diligence in its performance the greater, in proportion to the dangers which may be encountered. Those, at least, in the organization of the corporation, who are invested with controlling or superior authority in that regard represent its legal personality; their negligence from which injury results is the negligence of the corporation. The latter can not, in respect to such matters, interpose between it and the servant who has been injured, without fault on his part, the personal responsibility of an agent, who, in exercising the master's authority, has violated the duty he owes, as well to the servant as to the corporation.

Hough vs. Railway Co., 100 U. S. 218.

According to the authorities cited there can be no question as to the liability of the railroad company to the plaintiff for the injuries he sustained. If no one was appointed by the company to look after the condition of the cars, and see that the machinery and appliances used to move and to stop them, were kept in repair and good working order, its liability for the injuries would not be the subject of contention. Its negligence in that case would have been in the highest degree culpable. If, however, one was appointed by it chhrged with that duty, and the injuries resulted from his negligence in its per-

formance, the company is liable. He was, so far as that duty is concerned, the representative of the company; his negligence was its negligence and imposed a liability upon it, unless, as contended, it was relieved therefrom by the statute of Dakota.

Northern Pacific R. R. Co. vs. Herbert, 116 N. S. 652.

All occupations producing articles or works of necessity, utility or convenience may undoubtedly be carried on, and competent persons, familiar with the business and having sufficient skill therein, may properly be employed upon them, but in such cases where the occupation is attended with danger to the life, body or limb, it is incumbent on the promoters thereof and the employers of others thereon to take all reasonable and needed precautions to secure safety to the persons engaged in their prosecution, and for any negligence in this respect, from which injury follows to the persons engaged, the promoters, or the employers, may be held responsible and mulcted to the extent of the injury inflicted. The explosive nature of the materials used in this case, and the constant danger of their explosion from heat or collision, as already explained, was well known to the employers and was a continuing admonition to them to take every precaution to guard against explosions. Occupations, however, important, which cannot be conducted without necessary danger to life, body and limb, should not be prosecuted at all without all reasonable precautions against such dangers afforded by science. The necessary danger attending them should operate as a prohibition to their pursuit without such safeguards. Indeed, we think it may be laid down as a legal principle that in all occupations which are attended with great and unusual danger

there must be used all appliances readily attainable known to science for the prevention of accidents, and that the neglect to provide such readily attainable appliances will be regarded as proof of culpable negligence. If an occupation atttended with danger can be prosecuted by proper precautions without fatal results, such precautions must be taken by the promoters of the pursuit or employers of laborers thereon. Liability for injuries following a disregard of such precautions will otherwise be incurred, and this fact should not be lost sight of. *So, too, if persons engaged in dangerous occupations are not informed of the aecompanying dangers by the promoters thereof, or by the employers of laborers thereon, and such laborers remain in ignorance of the dangers and suffer in consequence,* the employers will also be chargeable for the injuries sustained. Both of these positions should be borne constantly in mind by those who engage laborers or agents in dangerous ocupations, and by the laborers themselves as reminders of the duty owing to them. These two conditions of liability of parties employing laborers in hazardous occupations are of the highest importance, and should be in all cases strictly enforced.

Mather vs. Rillston, 156 U. S. 398-9.
Western, etc., Co. vs. Ingraham, 70 Fed. R. 219.
Western C. & M. Co. vs. Berberich, 94 Fed. R. 333.
Cowen vs. Rush, 76 Fed. R. 349.
Texas & P. R. R. vs. Barrett, 166 U. S. 617.

IV.

Instruction No. 6 given at the request of counsel for defendant in error is erroneous.

The instruction complained of is as follows:

> Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room 8 for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room 8, and further believe from the evidence that signals of the kind described in the evidence warning against entry into said room were placed in such manner as to be observed by the deceased Flick and Kelly, and the meaning and significance of such signal was understood by them and such signal was known to be in use by the miners to inform them of the presence of gas in dangerous quantity, then if the jury believe from the evidence that such explosion was ceused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in its favor.

This instruction was evidently intended to give to the jury some rule of law, with reference to the risk assumed by the plaintiff's intestates. As such it is so inaccurate that it might be characterized as laying down a barbarous rule. If danger signals were in use in the mine, if they were used to warn the miners of dangerous bodies of gas, if they were placed so as to be observed by Flick and Kelly, and Flick and Kelly entered the room with a naked light, the defendant is not liable. The court, in effect, says:

It does not matter that the air-course had been without the knowledge of deceased obstructed by water for a month; it does not matter that the defendant was guilty of criminal negligence, of which deceased had no knowledge, in failing to remove the gas in room 8 for 48 hours before the explosion; it

does not matter that Donahoe, the mine foreman went into the room with Flick and Kelly; it does not matter that there is no evidence from which the jury could properly infer that either Flick or Kelly crossed over a danger signal; all of these circumstances are of no consequence; Flick and Kelly were fellow servants of the deceased; they were guilty of negligence, and therefore the defendant is absolved from liability for its negligence, however gross.

We contend taat the evidence shows affirmatively that neither Flick nor Kelly saw the danger signal; that the evidence shows affirmatively that the signals placed by the fire bosses, Ray and Deighton, were placed at points never reached by Flick and Kelly on the morning of the explosion; but we also contend, even if the contrary of this were established, even if the evidence showed that Flick and Kelly crossed the fire mark and ignited the gas in room 8 after crossing that mark, that the defendant in error would still be liable on account of the death of the intestates of plaintiff in error, because in their utmost significance these facts would establish no more than that the negligence of fellow servants combined with the negligence of the master to cause the injury. Flick and Kellly were fellow-servants of the intestates of plaintiff in error, but the fact that they were guilty of negligence, if such were the fact, would not in this case release the defendant in error from liability

In the case of the *Grand Trunk Railway Co. vs. Cummings*, Chief Justice Waite said:

> At the close of the case on both sides the court gave to the jury sundry instructions, not excepted to, and then, at the request of Cummings, instructed them further, "that, if Noyes (the person claimed to be a co-ser-

vant) was negligent, and if the company was also wanting in ordinary care and prudence in discharging their duties, and such want of ordinary care contributed to produce the injury, and the plaintiff did not know of such want of ordinary care and prudence, the defendant would be liable: that if two of those causes contributed, the company would be liable; that the mere negligence of Noyes, of itself, does not exonerate them, if one of their own faults contributes." * * *

In the instruction which was given we find no error. It was in effect that if the negligence of the company contributed to, that is to say, had a share in producing the injury, the company was liable, even though the negligence of a fellow-servant of Cummings was contributory also. If the negligence of the company contributed to, it must necessarily have been an immediate cause of the accident, and it is no defense that another was likewise guilty of wrong.

Upon the first review of these cases, the supreme court of New Mexico said:

There is no lack of recognition by us of the well established doctrine that when there is combined negligence of employer and fellow-servant, the master is liable for injury inflicted in the course of employment, but the cases we have referred to show, even if we consider failure of duty in this case on the part of the mine owner, that if such failure is known and acquiesced in without complaint and is efficient proximate cause of the injury, the servant is precluded from recovery. * * *

It is preferred, therefore, to place our conclusion upon the ground that the master in this case is not shown to be guilty of negligence of which plaintiff's intestate can complain, as he accepted, or at least there is

> evidence tending to show that he accepted employment with an implied waiver as to there being standing gas in places in said mine, provided they were guarded by a danger signal. If injury resulted from a fellow-servant's act or negligence under such circumstances such injury must be considered to have arisen from the risk incident to the employment.
>
> *C. C. R. R. Co. vs. Deserant, 49 Pac., 810.*

The instruction complained of clearly ignores the rule of law laid down in the Cummings case. It is more seriously objectionable because of the fact that it attempts to apply the doctrine of assumption of risk, without requiring the jury to find as a fact that deceased had any knowledge or means of knowledge of the obstructed air-course and of the existence of a dangerous body of gas in room 8.

A very recent decision of this court negatives the proposition laid down in this instruction in a most positive manner:

> But no reason can be found for, and no authority exists supporting, the contention that an employe, either from his knowledge of the employer's methods of business or from a failure to use ordinary care to ascertain such methods, subjects himself to the risk of appliances being furnished, which contain defects that might have been discovered by reasonable inspection. The employer on the one hand may rely on the fact that his employe assumes the risk usually incident to the employment. The employe on the other has the right to rest on the assumption that appliances furnished are free from defects discoverable by proper inspection, and is not submitted to the danger of using appliances containing such defects because of his knowledge of the general methods adopted by the employer in carry-

ing on his business, or because by ordinary care he might have known of the methods, and inferred therefrom that danger of unsafe appliances might arise. The employe is not compelled to pass judgment on the employer's methods of business or to conclude as to their adequacy. He has a right to assume that the employer will use reasonable care to make the appliances safe and to deal with those furnished relying on this fact, subject of course to the exception which we have already stated, by which where an appliance is furnished an employe, in which there exists a defect known to him or plainly observable by him, he cannot recover for an injury caused by such defective appliance, if with the knowledge above stated, he negligently continues to use it. In assuming the risk of the particular service in which he engages, the employe may legally assume that the employer, by whatever rule he elects to conduct its business, will fulfil his legal duty by making reasonable efforts to furnish appliances reasonably safe for the purposes for which they are intended; and whilst this does not justify an employe in using an appliance which he knows to be defective, or relieve him from observing patent defects therein, it obviously does not compel him to know or investigate the employer's modes of business, under the penalty, if he does not do so, of taking the risk of the employer's fault in furnishing him unsafe appliances. * * *

In Missouri Pac. Ry. Co. v. Lehmberg, 75 Tex. 67, the court considered a refusal to give a requested instruction, that if there were "any patent defects in the engine or tanks, and deceased knew, or might by ordinary diligence have known, of same, and said defects caused, or contributed to the injuries complained of, jury should find

for defendants." The court said:

* * * "Without now considering the question whether the rule in this respect charges an employe with knowledge of defects except with regard to such appliances or instruments as he is engaged himself in using, we think it sufficient to say that the law does not, under any circumstances, exact of him the use of diligence in ascertaining such defects, but charges him with knowledge of such only as are open to his observation. Beyond that he has the right to presume, without inquiry or investigation, that his employer has discharged his duty of furnishing him with safe and proper instruments and appliances."

Indeed, the ultimate result of the argument of the plaintiff in error is to entirely absolve the employer from the duty of endeavoring to supply safe appliances, since it subjects an employe to all risks arising from unsafe ones, if the business be carried on by the employer without reasonable care, and the employe knew, or by diligence, could have known, not of the dangers incident to the business, but of the harm possibly to result from the employer's neglectful methods. Measured by the principles just stated the trial court not only did not err in striking out parts of the instructions which were asked, but in the portions given stated the law to the jury more favorably to the plaintiff in error than was sanctioned by true legal principles."

Texas & Pacific Ry. vs. Archibald, 170 U. S. 672-3-4.

The rule is settled that if a servant, knowing the hazards of his employment as the business is conducted is injured while engaged therein, he cannot maintain an action against his employer for such injury merely because the business might have

been carried on in a safer mode. But if there are increased perils in the business, by reason of the use of defective appliances or otherwise, known to the master or for which he is responsible, and unknown to the servant, if the latter is injured thereby, and is free from negligence, the master is liable.

Behm vs. Armour, 58 Wis. 1.
Cowan vs. Railroad Company, 80 Wis. 284.
Grand Trunk Ry. Co. vs. Cummings, 106 U. S. 701.
Cerrillos Coal R. R. Co. vs. Deserant, 49 Pac. Rep. 810.
The Joseph B. Thomas, 81 Fed. Rep. 278.
Valley Ry. Co. vs. Keegan, 87 Fed. 849.
N. Y. & C. Ry. Co. vs. O'Leary, 93 Fed. 741.

V.

Instruction number ten given at the request of counsel for defendant in error is erroneous.

That instruction is as follows:

The burden of showing negligence on the part of the defendant, that caused the death of the persons for which this action is brought, is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air-course through which that portion of the mine where the deceased persons worked was ventilated. The presumption is that the mine was properly and sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find not only a partial obstruction of the air-course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony the jury believe

that notwithstanding the partial obstruction existed, there still was space enough in the air-course unobstructed to allow the proper and sufficient ventilation of the mine and of the fourth left entry where such deceased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of said persons.

The act of congress required the defendant in error to provide an adequate amount of air to dilute and render harmless and expel from the mine the noxious and poisonous gases. It also required that this quantity of air should be forced by proper appliances or machinery to each and every working place in the mine and that all workings should be kept clear of standing gas.

Fire damp such as was exploded in the White Ash Mine explodes only when mixed with atmospheric air. Unless the proportion of air is five times greater than the volume of gas, the mixture will not explode. If the proportion of air be more than thirteen times as much as the volume of gas, the mixture will not explode. The highest explosive force is had when one part of gas is mixed with nine to ten parts of atmospheric air.

This instruction tells the jury that if the obstruction in the air-course was not sufficient to prevent the passage of a necessary quantity of air, they may disregard the obstruction in the air-course as an element of neglect in the case. It ignores the statutory duty and withdraws from the attention of the jury the fact that the failure of the defendant in error to do the things required by the statute to be done is negligence *per se*.

It may be that there is a presumption that the mine was properly supplied with air, but that presumption

is entirely overthrown by the mere fact of a gas explosion, and also by the undisputed fact that a dangerous body of gas had been standing in room 8 of the fourth left entry for more than forty-eight hours before the explosion.

The instruction was misleading and prejudicial to plaintiff in error. It is especially objectionable when taken in connection with the Eighth and Twelfth paragraphs of the charge of the court, both of which, as originally given, were more favorable to defendant in error than it was entitled to, and both of which are necessarily limited and qualified by the instruction complained of.

While it may be true in some instances that the neglect of a statutory duty is but evidence of negligence and does not constitute negligence *per se*, it is equally true, and the courts uniformly hold, that where the duties imposed are imposed in furtherance of the public policy of the State, any violation of such duty from which injury occurs, is negligence *per se*.

This doctrine is carried so far as to avoid all contracts made with a view to limit liability for breaches of such duties.

Tiedman on Lim. Pol. Power, Sec. 98.
1 Thom. on Neg. 558.
Carroll v. R. R. Co., 38 Iowa, 122.
Reynolds v. Hinaman, 34 Id. 146.
Railroad Co. v. Stinger, 78 Penn. St. 225.
Messenger v. Pate, 42 Iowa, 445.
Railroad Co. v. McDonald, 152 U. S. 281.
Railroad Co. vs. Reesman, 60 Fed. 376.
Sommer vs. Coal Co., 89 Fed. 56-7.

VI.

Instruction number eleven, given at the request of counsel for defendant in error, in effect told the jury

that if Flick and Kelly were found dead in room number 8, they should find a verdict for the defendant.

That instruction was as follows:

> If the jury shall believe from the evidence that the defendant permitted fire gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly or either of them, by going into said room with a naked light *(contrary to the rules and orders of the defendant)*, and by such naked light the fire gas was ignited and exploded causing the death of plaintiff's intestates, such explosion and injury were directly and immediately caused by the act of the fellow servants of plaintiff's intestates, and not by the negligence of the defendant, and defendant is not liable therefor, and a verdict should be rendered for the defendant.

There was no evidence from which the jury could infer that Flick and Kelly went into room number 8 contrary to any rule or order of the defendant company unless it can be said that the placing of the fire-mark by the fire-boss was such rule or order.

The uncontradicted evidence shows that Flick and Kelly went into room No. 8 in company with the Pit Boss Donahoe as the bodies of the three men were found within a few feet of each other immediately after the explosion. The only rule bearing upon the subject, if written rules are contemplated by the instruction, is Rule 17:

> "All employes are requested to report any unsafe place to the mine boss, who shall at once have the same repaired and permit no one to enter therein until it is put in proper condition. Reckless persons, or those having no knowledge of mining, will not be permitted in the mine. The mine boss will personally examine the mine

and know all parts thereof are in safe condition." *(Trans. p. 213.)*

The evidence affirmatively shows that Donahoe knew that room 8 contained standing gas, but there is no evidence that either Flick or Kelly had any such knowledge. Flick and Kelly performed their labors under the immediate direction of Donahoe. There is not in this record one word of evidence from which the jury was authorized to infer that Flick and Kelly went into that room contrary to any rule or order of the defendant company unless they were authorized to make the inference from the mere fact that they were found dead in the room in company with Pit Boss Donahoe.

The instruction is evidently based upon a decision of the supreme court of West Virginia which is referred to and quoted from in the first opinion of the supreme court of New Mexico in this case.

The rule laid down in the West Virginia case was doubtless sound as applied to the facts of that case, but the instruction complained of is clearly erroneous because it was based on a supposed or conjectural state of facts of which there was no evidence.

> Correct instructions, if applicable to the case, the court, as a general rule, is required to give, unless the same are in substance and effect embodied in those previously given by the court to the jury; but the court is never required by law to give an instruction to the jury which is not applicable to the case even though it be correct as an abstract principle or rule of law; and it may be added that no prayer for instruction, whether presented by the plaintiff or the defendant, can be regarded as applicable to the case when it is wholly unsupported by the evidence introduced to the jury.
>
> Competent evidence may be written or oral, direct or circumstantial, but when

there is no legal evidence of any kind to support the theory of fact embodied in a prayer for instruction, whether presented by the plaintiff or the defendant, the instruction should always be refused; and such a ruling can never become a good cause for reversing the judgment. It is clearly error in a court, said Taney, C. J., to charge a jury upon a supposed or conjectural state of facts, of which no evidence has been offered, as the instruction presupposes that there is some evidence before the jury which they may think sufficient to establish the fact hypothetically assumed in that way by the court, and if there is no evidence which they have a right to consider, then the charge does not aid them in coming to a correct conclusion, but its tendency is to embarrass and mislead them, as it may induce them to indulge in conjectures instead of weighing the testimony. When a prayer for instruction is presented to the court, and there is no evidence upon the subject in the case, for the consideration of the jury, it ought always to be withheld, and if it is given under such circumstances, it will, as a general rule, be regarded as error in the court, for the reason that its tendency may be, and often is, to mislead the jury by withdrawing their attention from the legitimate points of inquiry involved in the issue.

Per Mr. Justice Clifford in *Insurance Company vs. Baring, 20 Wall. 161.*

Michigan Bank vs. Eldred, 9 Wall, 553.

Jones vs. Van Beuthysen, 103 U. S., 87.

St. Louis, etc. Co. vs. Spencer. 71 Fed. Rep., 93.

R. R. Co. vs. Houston, 93 U. S., 793.

N. W. Mu. Life Ins. Co. vs. Stevens, 71 Fed. R., 263.

New York etc. Co. vs. Blessing, 67 Fed., 281.

Boston and M. R. R. Co. vs. McDuffey, 79 Fed., 942.
Chicago vs. Robbins, 2 Black, 429.
Blackburn vs. Crawford, 3 Wall., 194.
Keyser vs. Hitz, 133 U. S., 147.
Northern Pacific R. R. Co. vs. Payne, 119 U. S., 561.

VII.

The Court should have charged the jury upon the theory that Flick and Kelly went into room eight in company with Donahoe and under his direction.

The eighteenth and nineteenth assignments of error may be considered together as the error complained of in each of them is of the same nature. The uncontradicted evidence in the case showed that Flick and Kelly performed their duties in the mine under Donahoe's immediate orders and that they were found dead in the same room with him. Yet the court, in its charge and in the instructions given at the request of defendant in error, utterly ignores this phase of the case. Donahoe's name is not mentioned in the charge nor in the instructions given at the request of defendant's counsel. The jury were as well authorized upon the evidence to infer that Donahoe ignited the gas as that either Flick or Kelly did, but the jury were not told, as they should have been, that if Donahoe directed or permitted Flick and Kelly to go into room 8 with naked lights, he knowing of the existence of gas in the room and they being ignorant of such existence, Donahoe was guilty of negligence which was imputable to the defendant.

This case does not present the necessity for any refinement of reasoning either upon the fellow-servant doctrine or upon the doctrine of assumption of risk. The supreme court of New Mexico says in effect that

Donahoe, Flick and Kelly were all fellow-servants of the deceased and that the liability of defendant in error, or rather the want of liability, is the same whether the gas was ignited by Donahoe, Flick or Kelly. But Donahoe was the person mentioned in Rule 17, to whom unsafe places were to be reported, who was to personally examine the mine and know that all parts thereof were in safe condition, and who was to permit no person to enter a place reported to be unsafe until it had been put in proper condition.

We beg to repeat the provisions of Rule 17:—

> "All employes are requested to report any unsafe place to the mine boss, who shall at once have the same repaired and permit no one to enter therein until it is put in proper condition. Reckless persons, or those having no knowledge of mining, will not be permitted in the mine. The mine boss will personally examine the mine and know all parts thereof are in safe condition." *(Trans. p. 213).*

We respectfully submit that the docrine laid down by the court below, is in direct conflict with every decision of this court from the case of Hough to the present time; but if it were true that Donahoe, Flick and Kelly were all fellow servants of the deceased, the liability of the defendant in error would still be beyond dispute under the doctrine of the Cummings case.

No decision of this court warrants the contention that deceased assumed the risk that the mine boss would permit or order their fellow servants to enter with a naked light a room known to him to contain a dangerous body of standing gas, nor that the mine boss would himself, in company with others, enter such a room under like conditions. On the contrary, the cases in which this Court has held that the servant does not assume such risk are too numerous for

citation. Many of them have already been cited in other parts of this brief.

Central R. R. Co. vs. Keegan, 160 U. S. 264.
Railway Co. vs. Baugh, 149 U. S. 368.

VIII.

There is irreconcilable conflict between the charge of the court and the instructions given at the request of Counsel for Defendant in error.

For the purpose of convenience in comparing the charge and the instructions we print them in double columns, as follows:

FROM CHARGE OF COURT.

10.

I charge you, gentlemen, that it is the duty of the master to use reasonable care and diligence to provide a reasonably safe place in which his servants shall perform their respective duties, and also to use reasonable care and diligence to provide reasonably safe appliances for the protection of his servants, and to use reasonable care and diligence to keep such appliances in a reasonably safe condition for the protection of his servants; and the master cannot, by the delegation of any part of his duty to an agent, or servant, relieve himself of responsibility for injuries to his servants arising from the neglect of this duty. Any agent or servant of the master, appointed by him for the purpose of looking to the safety of such appliances, without regard to the rank or station of such agent, or servant, is the representative of the master for such purpose, and the negligence of any such agent or servant in such matters is, in contemplation of the law, the negligence of the master, and the master is liable for any damage occasioned thereby.

INSTRUCTIONS GIVEN AT REQUEST OF COUNSEL FOR DEFENDANT IN ERROR.

I.

The jury are instructed that what was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine, that were obvious or might with reasonable diligence have become known; and in the absence of evidence to the contrary, it is presumed that the defendant performed its entire duty toward the miners in that respect.

6.

Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room eight for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room eight, and further believe from the evidence that signals of the kind

11.

Although you may believe from the evidence that the fellow servants of the deceased by their negligence contributed to the bringing about of the explosion in which deceased were killed, yet if you also believe from the evidence that the negligence of defendant also contributed to the same result, you must find a verdict in favor of plaintiff unless you believe from the evidence that plaintiff's intestates or one of them knew or had means of knowledge of such negligence of the defendant, and, notwithstanding such knowledge or means of knowledge, continued to work in the mine of defendat.

12.

The law requires that the defendant shall keep the workings in its mine clear of standing gas, and if you believe from the evidence the defendant failed to keep the workings in its mine clear of standing gas, and that such failure contributed to the deaths of the deceased then you are justified in believing defendant guilty of negligence and must find a verdict in favor of the plaintiff, unless you believe from the evidence that the plaintiff's intestates or one of them knew of the existence of such gas and continued to work in the mine of defendant with such knowledge.

13.

If the jury believe from the evidence that the plaintiff's intestates knew or had reason to know that dangerous bodies of gas were permitted to accumulate in the open places of defendant's mine and to remain for a period of thirty-six hours or more, without any effort on the part of the agents and the servants of said defendant to described in the evidence warning against entry into said room were placed in such a manner as to be observed by the deceased Flick and Kelly, and the meaning and significance of such signal was understood by them and such signal known to be in use by the miners engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantity, then if the jury believe from the evidence that such explosion was caused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in its favor.

10.

The burden of showing negligence on the part of the defendant, that caused the death of the persons for which this action is brought is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air-course through which that portion of the mine where the deceased persons worked was ventilated. The presumption is that the mine was properly and sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find not only a partial obstruction of the air-course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony the jury believe that notwithstanding the partial obstruction existed there still was space enough in the air-course unobstructed to allow the proper and sufficient ventilation of the mine and of the fourth left entry where such deceased persons were at work, you will find a verdict for the defendants, unless you find

move the same, and that no precautions against the explosion of such gases were accustomed to be taken except to mark the open place where such gas might be with a danger mark, and plaintiff's intestates, notwithstanding such knowledge or means of knowledge continued to work in said mine, the plaintiff's intestates thereby assumed the risk incident to such method and can not recover if their fellow servants ignited such gas by going over or disregarding such fire mark.

14.

If you believe from the evidence that the explosion originated in room eight of the fourth left entry of the mine in consequence of the accumulation in said room of a body of dangerous gas, merely guarded by a fire mark or danger signal for thirty-six or forty-eight hours before the explosion, and that plaintiff's intestates did not consent or agree to work in said mine with places dangerous because of gas merely guarded by fire marks or danger signals for thirty-six or forty-eight hours, then plaintiff is entitled to recover in each case, although you may also believe that said body of dangerous gas was ignited by the negligence of fellow servants of plaintiff's intestate.

from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons.

11.

If the jury shall believe from the evidence that the defendant permitted fire gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick or Kelly or either of them, by going into the said room with a naked light, *contrary to the rules and orders of the defendant*, and by such naked light the gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion and injury were directly and immediately caused by the act of the fellow servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor; and a verdict should be rendered for the defendant.

It is impossible to read these two sets of legal propositions and conclude that both of them correctly state the law of the same case. The giving of two or more instructions which are inconsistent with each other is calculated to mislead the jury and leave them in doubt as to the law. How were the members of the jury to reconcile these differences and select from these conflicting propositions the correct principles by which they should be guided? It is

highly probable that no two men on this jury understood, alike, the law of the case as given by the trial judge, and it is certain that no man can take the charge and the instructions given on request of counsel for defendant in error, and reconcile the conflicting principles contained in them. There is a manifest conflict between instructions numbers six and eleven, given at the request of counsel for the defendant in error.

If the rules and orders of the defendant company mentioned in instruction No. 11 contemplate anything else than the rules and orders forbidding any person to cross over a fire mark or danger signal, there is not even a suggestion in the record from which the jury could infer that any such rule or order was violated, and for that reason instruction No. 11 ought not to have been given. If, however, the rules and orders there referred to contemplate the rule forbidding every person to cross over a fire mark or danger signal, instruction No. 6 given at the request of counsel for defendant in error, covered that aspect of the case and was, as has already been shown, much more favorable to defendant in error than is justified by correct legal principles.

In addition to all of this, there is not in the record any evidence to justify either instruction No. 6 or instruction No. 11, given at the request of counsel for defendant in error, unless they be justified by the bare fact that Flick and Kelly were found dead in room No. 8. Certain it is that no witness testified that either Flick or Kelly disobeyed any order or any rule or crossed over a danger signal, and there was no circumstance or combination of circumstances in evidence from which the jury might infer any of these things.

Bank of Metropolis vs. New England Bank, 6 How. 226.

Wenning v. Teeple, 41 N. E., (Ind.) 600.
Mooar vs. Harvey, 125 Mass. 574.
Union Bank of Trenton v. 1st Natl. Bank, 2 Mo. App. 458.
Bleiler v. Moore, 69 N. W. 164.
Hohen vs. Burlinglon R'way Co., 20 Iowa 562.
Railroad Company vs. Payne, 49 Ill. 499.
Nichols vs. Jones, 32 Mo. App. 667.
Quinn vs. Donovan, 85 Ill. 196.
Haight vs. Vallet, 89 Cal. 245.
Pumphay vs. Walker, 75 Iowa 408.

IX.

It was error to deny the motions for new trial.

We freely concede that the action of the court, in denying a motion for new trial, is not, ordinarily, assignable for error, or subject to review on writ of error, but we contend that we are entitled to have the action of the court refusing new trials to plaintiff in error, reviewed because that court refused to exercise its discretion on the motion, and ordered it to be certified upon the record "that said motion is overruled upon the ground that there was a conflict of evidence in the cases and this court is of opinion that in such a case it has no discretion to set aside the said verdicts as against the weight of the evidence " *(Trans. p. 30).*

This amounts to a declaration by the trial judge that in his opinion the verdicts were against the weight of the evidence and that he would have granted the new trial upon that ground if he had believed he had the power to do so. The common law power of a *nisi prius* judge in his discretion to set aside a verdict which is contrary to the weight of evidence, has been the subject of some controversy in recent years and some very able lawyers and judges have contended that a judge who refused to direct a ver-

dict at the close of the evidence, was without power to set aside, as against the weight of the evidence, a verdict rendered by a jury after such refusal. The learned judge adopted this view of his duty in these cases. We submit, however, that this is an erroneous view of the duty and responsibility of the trial judge.

Fortunately for us this question has recently been determined in a way which leaves it no longer open to serious controversy. Judge Taft, speaking for the Circuit Court of Appeals of the 6th Circuit in *Felton vs. Spiro*, said:

> A motion for a new trial is of course addressed to the discretion of the Court, and, if the Court exercises its discretion, and either grants or denies the motion, its action is not the subject of review. This is so well settled that it is unnecessary to cite authorities upon the point. But the motion for a new trial is the remedy accorded to the party litigant for the correction by the trial court of injustice done by the verdict of a jury. It is one of the most important rights which a party to a jury trial has. It is the right to invoke the discretion of the court to decide whether the injustice of the verdict is such that he ought to have an opportunity to take the case before another jury.
>
> * * * * * * *
>
> We come, then, to the question whether a federal court, in which a jury has rendered a verdict, has the power to set aside a verdict, when in its opinion, it is contrary to the decided or overwhelming weight of the evidence, and in the exercise of a legal discretion may properly do so. Upon this point we have not the slightest doubt. This court in *Railway Co. vs. Lowery, 20 C. C. A., 596, 74 Fed. 463*, has already decided it. In an elaborate and most care-

fully considered opinion, Judge Lurton, speaking for the court, points out the distinction between the insufficiency, in law, of evidence to support an issue which will justify a peremptory instruction by the court, and that insufficiency, in fact, of evidence, when weighed with opposing evidence, which, while not permitting a peremptory instruction, will justify a court in setting aside a verdict based on it, and in sending the parties to another trial before another jury. The cases in England and in this country are reviewed at length by Judge Lurton, and the conclusion reached is fully supported by authority.

It may therefore be fairly claimed that these verdicts come into this Court for review lacking an absolutely essential element of validity, namely, the concurrence of the trial judge. It is true that the trial judge entered judgment upon these verdicts, but, before doing so and for the preservation of the rights of the plaintiff in error, he caused to be certified upon the record the fact that he believed himself to be without authority to withhold his concurrence upon the ground that the verdicts were contrary to the weight of the evidence. The supreme court of New Mexico did not specifically pass upon the question here sought to be presented, but held, as matter of law, not only that there was no conflict in the case such as justified the sending of the case to a jury, but also that as a matter of law the evidence was insufficient to establish negligence on the part of the defendant in error.

We submit that plaintiff in error upon this state of the record has a right to have this action of the trial judge reviewed, unless this court shall be of opinion that the supreme court of New Mexico is right in its conclusion that, upon all of the evidence, a verdict should have been directed for the defendant in error.

If that conclusion is correct, the plaintiff in error has not been prejudiced by the action of the trial judge here complained of.

United States vs. Maddox, 146 U. S., 140.
Felton vs. Spiro, 78 Fed. Rep., 581.
Railroad Co. vs. Lowry, 74 Fed. Rep., 417.
Insurance Co. vs. Randolph, 78 Fed. Rep., 760.

X.

The supreme court of New Mexico was in error in holding that the trial judge should have directed a verdict in favor of defendant in error.

Out of abundant caution we have assigned for error each of the several propositions laid down by the supreme court of the Territory of New Mexico in its opinion, although we are not at all sure that in so doing we will have succeeded in giving any additional aid to this court in its examination of the case or any additional information to counsel for the defendant in error as to the points upon which we rely for reversal of the case in this court. We think we have sufficiently shown such errors on the part of the trial court as entitled us to a reversal by the supreme of the Territory, and shall confine ourselves, in the discussion of the last nine assignments of error, to an effort to show that the supreme conrt of the Territory is in error in holding that the trial judge should have directed a verdict in favor of the defendant in error.

We shall not attempt to review the evidence in the case, but respectfully invite the attention of the court to that part of the statement contained in this brief in which we set forth what we contend is established beyond controversy.

If there be any conflict in the evidence upon these points the learned counsel for defendant in error will,

undoubtedly, point out in his brief how the conflict arises, and where, in the record, the evidence of such conflict is to be found. We insist that there is no such conflict, and that counsel for defendant in error admitted, by moving for a peremptory instruction at the close of the case, that no conflict existed.

We further insist that plaintiff in error was entitled to a direction to the jury that, upon the undisputed facts, defendant in error was guilty of negligence as a matter of law and that nothing should have been left to the jury except the question of damages.

The supreme court of New Mexico seems to have been of the opinion that we did not show with sufficient certainty how the explosion was caused or where it originated, but we submit that the evidence adduced was not legally insufficient because no witness was produced who could testify from his own knowledge, by reason of having witnessed the explosion, to these things.

Counsel for defendant in error by asking the court to give instruction No. 6 and instruction No. 11, must certainly be held thereby to admit that there was evidence from which the jury might infer that the explosion was occasioned by the accumulation of a dangerous body of gas in room 8 of the fourth left entry and originated there, and he must likewise be held to admit, by asking for instruction number 10, that there was evidence from which the jury were authorized to infer that the air-course was obstructed by water, and it is difficult to understand upon what theory it can be contended that the jury might not, from these circumstances, find that the defendant in error was guilty of negligence. Indeed, it is not too much to claim that the inference of negligence follows as matter of law from the existence of these facts. There were, however, physical conditions

found in the mine after the explosion which preclude any reasonable contention that the agents of defendant in error charged with the duty of looking to the safety of the deceased, were not guilty of criminal negligence. The burned and broken bodies of the twenty-three persons found in the fourth left entry, the burning of the props in all the rooms from 8 all the way around to the point in the air-course where the water had accumulated, taken in connection with the absence of any evidence of flame from room 8 toward the main slope and the plane showed clearly the course of the flame and pointed with unerring certainty to the initial point as well as to the character of the explosion. They certainly satisfy all legal requirements as to the sufficiency of the proof. Yet, in addition to all this, the undisputed facts are that every man in the fourth left entry of that mine at the time of the explosion, except the men working on the plane, was killed, while the men on the plane came out uninjured. How did they escape? They escaped because they were receiving their ventilation through the opening in the upper air-course which had been made two weeks before the explosion. If they had depended for their ventilation upon the air which passed through the air-course of the fourth left entry, they would have perished from the afterdamp.

The circumstance that the after-damp passed into the air-course of the third left and did not reach the plane, is conclusive. There was a break-through from room 6 of the fourth left entry to the air-course of the third left entry, and the "after-damp" found its way through that opening and killed a driver and a pair of mules in that entry, but there is no evidence of after-damp on the plane of the fourth left and the men working there were uninjured.

If the plaintiff in error had been under obligation to establish beyond a reasonable doubt the cause and initial point of this explosion, the evidence in this case would meet that requirement, but to sustain the rulings of the supreme court of New Mexico under discussion, this Court must not only hold that the evidence was not sufficient to establish the cause and initial point of the explosion, but must go farther and hold that it was so insufficient that all reasonable men must concur in the conclusion that it is impossible from the evidence to tell where this explosion originated or how it was occasioned.

We respectfully submit that a case establishing criminal negligence by more cogent evidence was never presented in a court of justice.

The rule is well established in this Court that a negligence case should never be taken from a jury, if the facts are such that reasonable men may fairly differ upon the question as to whether or not the defendant has been guilty of negligence.

It would be an imposition upon the patience of this Court to attempt to cite and comment upon its numerous decisions in support of this principle. We content ourselves with the suggestion that the question is no longer open to discussion here.

Warner v. B. & O. R. R. Co., 168 U. S. 339.
Chicago Ry. Co. v. Lowell, 151 U. S. 209

We respectfully submit that the judgment of the supreme court of New Mexico should be reversed.

FRANK W. CLANCY,
NEILL B. FIELD,
Counsel for Plaintiff in Error.

In the Supreme Court of the United States.

OCTOBER TERM, A. D. 1899.

No. 269.

JOSEPHINE DESERANT, Administratrix of Henri Deserant, Jules Deserant and Henri Deserant, Jr.,
Plaintiff in Error,

AGAINST

CERRILLOS COAL RAILROAD CO.,
Defendant in Error.

Reply Brief of Plaintiff in Error.

It is much to be regretted that counsel are unable to agree in their attempts to state the facts disclosed by this record. It is to be deplored that counsel for defendant in error in their brief appear to question the good faith of our presentation of what we claim to be the facts and to suggest that we are attempting to deceive the Court and to obtain a reversal of this case by intentional misstatements of the evidence.

Our contentions are characterized as "untrue," "without foundation," "pure assumption," "mere guesswork," "fallacious," "disingenuous," "brazen," "deliberate misstatements," "pure surmise,' "unwarrantable, and untrue," "without justification," "wholly unjustifiable" and "puerile," all of which we take to be their method of conveying to the mind of the Court their respectful dissent from our various propositions. We feel that we are justified in declining

to reply, in kind, to this character of argument. Even in New Mexico we have learned that this Court considers the use of such expressions to be unseemly and that its rules require us to be " respectful " to opposing counsel. We, therefore, ask leave to deny generally any insinuations and suggestions of impropriety contained in brief of counsel for defendant in error, and to be permitted to verify by quotation from and references to the record, as best we may, those statements which counsel attack in such forceful language. We are persuaded that counsel need have no fear that this Court " will not examine the evidence " or that in this case the failure of the Court to examine the evidence will " enable the uncandid to profit by their disingenuousness."

The purpose of this reply brief is to facilitate such an examination and to bring to the attention of the Court some portions of the record which, in our opinion, support our contention as to the facts. Incidentally, but only incidentally, we shall attempt to meet the legal propositions advanced, and to show that some of our contentions as to the law of the case are apparently misunderstood by the learned counsel. We shall hope, also, to entirely eliminate some of the questions which are discussed at great length in the brief to which this reply is made.

We shall not review their extracts from the evidence, nor shall we attempt to impeach in any manner their statement of what they claim to be the facts, except to say that, in our opinion, an examination of the entire evidence, for which purpose it has been brought into this Court, will enable the Court without difficulty to readily resolve all differences between counsel as to the facts, without reliance upon statements of counsel for them.

I.

As to Alleged Misstatements by Us.

On page 39 of brief for defendant in error is said:

> "On page 9 of opponent's brief it is stated that 'no witness was produced who had seen the siphon working within a month of the explosion.' This is in a large sense untrue, as will be seen from the foregoing abstract."

On page 8 of their brief it is said:

> "The evidence tended to show that the siphon was running up to the time of the accident." * * *

Here is the evidence:
James Merchant, "Boss Driver," testified:

> "That the water from the fourth left air course, when it ran through the siphon pipe, ran down through room one of the fifth left and through the parallel slope to the bottom of the mine; that he thought the double shift was put to work about the first of the year, that he did not know when the water had run through the siphon pipe before the explosion; that to make the siphon run it was necessary to fill it with water and then the valves at both ends would be opened and the water would run out. * * * That he did not remember how much water had been hauled out within a week or ten days prior to the explosion." *(Trans., p. 43).* * * * "That there was very little water coming out near the time of the explosion on his shift; that some of the water was taken from the bottom of the mine and some from the sump near the sixth right; that the water coming out of the fourth left back-entry siphon ran to the foot of the main slope; that he was sure of that for the reason that they were not allowed to run that water down there for fear of drowning out the slope men. * * * That the siphon pipe was a two-inch pipe; that if any man started the siphon to running, and he went

by it or was anywhere near that pipe, he would know it was running, but if the pipe was started when he was in some other part of the mine he would not know anything about it. * * * That his orders were not to haul water when he could get coal. * * * That the lower end of the siphon pipe was on the fifth left main entry, and after the water emptied out of the pipe it ran away by itself ; that he could not remember when he had seen indications of the water having run there before the explosion " *(Trans., pp. 44 and 45).*

James C. Porterfield, mining engineer of defendant in error, testified :

" That he was working in room number seven of the second left entry at the time of the explosion ; that at some time within two hours he was at the siphon pipe and helped to carry water for a little while ; that he was pouring water in the stand pipe of the siphon and others were carrying the water ; that he had seen that pipe running before the explosion, but could not tell how long before ; that after the explosion he was at the lower end and turned on the valve and the siphon started running " *(Trans., p. 45).*

Philip Rolando testified :

" That, as far as he could remember, there had been a double shift at work in the mine for about a month before the explosion ; that after the mine was double-shifted there was a great deal less water hauled than before ; that after the mine was double-shifted his orders were to hoist water when he had no coal to take out ; that there was water made on both sides of the mine ; that he could not say how much water was taken out per day during January, or during the last week of January, or during the first, second or third week of February, *but he knew very little came out that month ;* that he knew nothing about what was done on the other shift " *(Trans., p. 46).*

It was part of the duty of this witness to haul water out of the mine.

J. W. Ray, night fire boss, testified :

" That on the 27th of January, 1895, there was water in the fourth left air course, but he could not say how much, and that from that time until the explosion that air course was never free from water ; that there was a siphon to drain the water out of that air course ; that he never knew it to run between the 27th of January, 1895, and the explosion ; that he could not tell how much water there was in there immediately prior to the explosion, but there was quite a quantity ; that it was somewhere around the neighborhood of between two hundred and three hundred feet in length ; that the accumulation of water was in his way a little in the discharge of his duties as fire boss ; that Donahue was the pit boss ; that shortly before the explosion he told Donahue that he had too much work to do, if he would take that water out of there it would shorten his run or else give him a man to hang canvas; *that Donahue told him his orders were to hoist no water,* but he would give him a man ; that this was probably four or five days or a week before the explosion *(Trans., p. 35).* * * * That as soon as he heard of the explosion he came to the mine and went down with Brown, pit boss, at the hard-coal mine to the fifth left, and came up through number one room to the fourth left air course and tried to get in there and encountered the water ; that they then went back to the fifth left and up the slope to the fourth left entry and put a brattice across the slope, turning the air into the fourth left entry ; *that he went into the water in the fourth left air course up to his armpits (Trans., p. 37).*

" That he had seen the pipe of the siphon in the fourth left back entry going around a sharp corner to go down the hill ; that, as well as he could remember, the siphon ran down through number one room of the fifth left ; that he did not know how far the pipe extended, but was once at its lower end after the explosion ; that before the explosion he had nothing to do with the pipe, and that it might have been running prior to the explosion, so far as he knew. * * * That if the air was not shut off in the back air course the mine would have been safe ; that if there had been sufficient air there would have been no gas ; that gas is lighter than air

and seeks the high places in the room; and before any gas could have filled room eight it would have spread through every room along the entire entry" *(Trans., pp. 40, 41).*

By James Kilpatrick, night foreman or pit boss, plaintiff in error offered to prove affirmatively that "for a considerable time prior to the explosion the means provided for removing the water from the fourth left air course was not kept in operation or employed for that purpose," but the Court, at the instance of defendant in error, excluded the evidence *(Trans., p. 121).*

John Hunt, boss driver on the night shift at the time of the explosion, testified at considerable length on the subject of hauling water out of the mine, but said very little about the siphon; we here quote only part of his testimony, but refer to pages 155 to 161, where his testimony will be found in full.

Hunt testified as follows:

"Q. Now, is it not a fact, Mr. Hunt, within your knowledge of the method of operating that mine, that, when that siphon pipe within the fourth left was running, the water had to be brought to the surface or it would go to the face of the slope and stop the work there? A. Yes, if it was never hauled out it would go to the face of the main slope.

"Q. Is it not also a fact that water was left in the fourth left? A. I don't know anything about it.

"Q. And not allowed to run down there because there was not time to haul all of the coal and all of the water? A. Not that I know of, sir.

"Q. There wasn't time to haul all the coal and all the water, was there? A. Well, I don't know how much water there was left.

"Q. You frequently had to leave water in the mine that ought to have been brought out because you didn't have the time? A. I never drained the sumps dry.

"Q. You frequently had to leave water in the mine that ought to have been brought out, because you did not have time to get it out, didn't you?

"A. Well, I should judge there was some left in these sumps; yes, sir.

"Q. And the only reason that it was left was that you did not have time to get it out?

"A. I guess so" *(Trans., pp. 156-7).*

On cross-examination Hunt testified:

"Q. Did you ever see the water come from the fourth left to the seventh left sump?

"A. Yes, sir.

"Q. When?

"A. I don't know; could not exactly say.

"Q. Had you seen it run within a month before the explosion?

"A. I could not say.

"Q. Could not say that you had, could you?

"A. Yes, sir.

"Q. That you had seen it running within a month?

"A. Oh, no; not that I had seen it running.

"Q. You had seen it running, but you don't know whether it was a month before the explosion or a longer time?

"A. Yes, sir" *(Trans., p. 159;* see, also, *pp. 160, 161).*

James Duggan, superintendent, testified in part as follows:

"Q. And you never inquired whether the siphon ran or not within those three or four months, did you?

"A. I knew it had run inside of three or four months.

"Q. Well, when did you know of its running last before the explosion? A. I don't remember.

"Q. You didn't see it running within a month before the explosion, did you? A. I might have and I might not.

"Q. Well, you don't know that you did, do you? A. I don't remember; I might and I might not.

"Q. Do you remember seeing it run after the first of January, Mr. Duggan? A. I don't remember now when I saw it run, with exception that it was within probably three or four months, but I knew I had seen it running during that time."

On page 40 of the brief it is said:

"The statement on page 12 that the slope leaked more than 60% before the air reached the bottom of it is pure assumption and mere guesswork."

Here is the evidence:

James Duggan, testifying as a witness for defendant in error, said:

> "A. We took air measurements on February 9th, 1895. The measurements were as follows: On the main intake I got 31,150 cubic feet of air going into the mine. On the first return on the 7th left we got 4,418 cubic feet per minute; on the 7th right we got 4,720 cubic feet per minute; on the first left we got 12,276 cubic feet per minute; on the first right we got 20,720 cubic feet per minute" *(Trans., p. 174).*

A simple mathematical calculation demonstrates our assertion.

At the main intake (the mouth of the slope) the air going in measured in cubic feet per minute	31,150
On the seventh left the air measured in cubic feet per minute	4,418
On the seventh right the air measured in cubic feet per minute	4,720
Total	9,138
Loss	22,012

or seventy per cent.

Our assertion is further verified thus:

On the last return, on the first left the air measured in cubic feet per minute	12,276
And on the last return, on the first right it measured in cubic feet per minute	20,720
Total air coming out of mine	32,996
Total going in	31,150
Gain	1,846

Which shows that the air, which was lost going down the slope, found its way into the return air courses—the increase being due to expansion caused by difference in temperature between the outside and inside of the mine (see testimony of Duggan, *Trans., p. 196).*

Another air measurement was taken on February 23d, 1895. This was three days before the explosion, and was on Saturday

evening after all work was finished in the mine, the doors closed and everybody out of the mine except the superintendent and the foreman *(Trans. p. 197)*. That measurement showed:

At the main intake the air going into the mine measured in cubic feet per minute		28,700
On the seventh left	5,202	
On the seventh right	4,000	
		9,202
Loss		19,498

or sixty-eight and six-tenths per cent. This measurement also demonstrates that on this occasion less air was coming out than was going into the mine, thus:

At the main intake there were going in		28,700
At the last return on first left there were coming out	12,012	
At the last return on first right there were coming out	12,656	
Total		24,668
Loss		4,032

Trans., p. 175.

An examination of the testimony of Mr. Duggan on page 196 of the transcript will show the significance of this fact. On page 41 of the brief it is said:

> "The statement on page 13 under the fourth head, that if there had been no obstruction in the fourth left air course there would have been no occasion to open a stopping to allow the air from the upper air course to pass to the men on the plane of the fourth left entry, is fallacious, for it will be remembered that after the air passed through the rooms in the fourth left main entry, and when it came to room six, after having passed room 8, it was split up, a large part of it going to the third left back air course and the other part being diverted into the rooms off the plane, and from thence back into room 1, and thence to the third left air course, so that those rooms off the plane would never have as much air as had passed through room 8."

Thomas Leaden, an experienced coal miner, a member of the New Mexico Legislative Committee, who examined the mine on behalf of that body, testified on this point:

> "That the air must be supplied to the people at the face of the entry before it could be supplied to the people working on the plane of the fourth left, *if it were going its right course*" *(Trans., p. 55).*

No witness attempted to contradict his testimony on this point. Kilpatrick, night foreman or pit boss, testified:

> "Q. Within two or three weeks before the time of the explosion did you know of any complaint from the men working on the plane about the condition of the air?
>
> "A. No, sir.
>
> "Q. Did you at any time during the month of February, 1895, know of an opening having been made through the stoppings in the upper-air course or the fourth left entry which would have the effect of increasing the supply of air to the men on the plane?
>
> "A. Yes, sir.
>
> "Q. Did you at any time during the month of February know of an opening from room 6 into the back-air course of the third left being stopped so as to turn the whole current of air down towards the plane instead of letting part of it escape through that opening?
>
> "A. No, sir, I never knew that it was entirely stopped at any time. One corner of the curtain was always open, a little of the canvas across the neck of that room where it went through.
>
> "Q. That opening through the stoppings in the upper-air course, did that remain open up to the time of the explosion, do you know?
>
> "A. Yes, sir" *(Trans., pp. 117, 118).*

This witness further testified on re-direct examination:

> "Q. In your cross-examination, Mr. Kilpatrick, you spoke about an opening supplying air to the plane rooms. I will ask you to state whether or not that opening in any way interfered with the circulation and conduct of the air up to the

face of the fourth left entry, and the rooms turned off that entry?

"A. No, sir" *(Trans., p. 128).*

John Deighton, day fire boss at the time of the explosion, testified on this point as follows:

"Q. Do you know anything about an opening on the upper air course to the plane, to let air in to the men on the plane, which did not go to the face of the works in the fourth left?

"A. I don't remember.

"Q. An opening in a stopping, a board knocked off there, ten days or two weeks before the explosion, in the upper air course on the fourth left, which would let air into the plane from the parallel air course?

"A. Will you allow me to look at the map?

"Q. Certainly.

"A. Yes, I remember a board being taken off there.

"Q. Why was it taken off, Mr. Deighton?

"A. To let air into the plane."

The evidence quoted, we think, warrants our contention on this point, and we submit that no attempt was made at the trial to explain why this opening became necessary ten days or two weeks before the explosion, or why it was permitted to remain until the explosion occurred.

If some condition, other than an obstruction in the air course, caused the necessity for this opening, why was not that condition shown? Why do not learned counsel point out some other explanation of it? It was certainly not the regular method of supplying air to the men on the plane, but we have no suggestion from our learned adversaries as to why this opening was made.

On page 41 of the brief it is said:

"The statement on the same page (13) that 'the evidence establishes beyond a reasonable doubt that the obstruction by water of the fourth left air course and the accumulation of gas in room eight of the fourth left entry combined to cause this awful calamity,' is as disingenuous as it is brazen in view of the unanimous finding to the contrary of the

> Supreme Court of the Territory and of all the evidence as shown by our abstract," etc.

It is true that the Supreme Court of New Mexico unanimously held that this is purely speculative and is not supported by the evidence, but is it either "disingenuous" or "brazen" to contend in this Court, that the Supreme Court was in error in this conclusion, so long as the contention is made in respectful langugage? That Court said in its opinion:

> "It cannot be positively proved what was the initial point of the explosion or what caused it."

We have brought the case here to obtain a review of that conclusion and insist that, that learned tribunal erred as to the legal effect of the evidence. It is true that the evidence is entirely circumstantial, but it is not for that reason, (or for any other, as we insist) legally insufficient. We admit that our evidence must show, with reasonable certainty, that the death of the intestates of plaintiff-in-error was caused by the negligence of defendant-in-error, and in what that negligence consisted; we utterly deny that we must produce an eye-witness to the explosion in order to satisfy the requirement of reasonable certainty, in our proof.

On page 42 of the brief it is said:

> "On page 15 of opponent's brief it is stated:
>
> "'On Sunday night Kilpatrick, the night foreman, found two men working in that room with a *safety lamp;*'- and it is said that 'it is difficult to understand why such a deliberate misstatement should be made.'"

Truly, indeed, it is difficult to understand why counsel intending to deceive the Court should refer to the very page of the transcript which would disclose the fraud. The idea intended to be conveyed was that, on Sunday night before the explosion, Kilpatrick knew that the air current in room 8 was bad; that he found miners at work there with a safety lamp at hand for the purpose of testing for gas (which is but another method of testing air) in order to protect themselves. It was not contended that they had not also the ordinary naked lights used by miners, but the presence of the safety lamp was the important fact intended to be called to the attention of the Court.

The reference to the transcript was unfortunate for us, because the point we were trying to make does not appear on the page cited, while the fact of the naked lights does. The reference should have been to pages 130, 131, of the transcript.

We extract the following from the testimony of Kilpatrick at the pages cited:

> " Q. Were they working with naked lights, or how ?
>
> " A. Yes, but where they had them, I don't know whether they had them in their hats or not. I know their their safety lamp was hanging on a prop and I took it off the prop " *(Trans., p. 130).*
>
> " Q. And so the men at work there had a safety lamp that night ?
>
> " A. Yes, sir.
>
> " Q. Did you give them that safety lamp or had they got it presumably from the fire boss ?
>
> " A. I didn't give it to them ; they got it from the fire boss; that would be the natural way for them to get it " *(Trans., p. 131).*

It is difficult to understand the mental operations of gentlemen who discover in this a willful misstatement or an intention on our part to deceive or mislead the Court.

On page 42 of the brief it is said :

> " The statement on page 19 that the evidence conclusively establishes that the explosion was caused by the ignition of gas in Room 8 of the fourth left entry of the mine is, in view of the evidence to the contrary set out in our abstract, unwarrantable and untrue."

On pape 12 of their brief we have the statement of counsel for defendant in error on this point ; it is :

> " It is manifest that if the explosion were caused by the ignition of a body of gas in room 8, that there being air in the lower part of the room and in the upper entry way adjacent, a combustion would have taken place between the air and the gas, generating a new gaseous body with such force, rapidity and volume that it *would have gone in the direction*

> *of least resistance* and certainly would have been felt the greatest in all parts of room 8 and in room 7, the adjoining room; and, as there would be a sudden expansion caused by the combustion, there would be immediately and as suddenly a contraction *causing a loud report.*"

Let us compare these two statements in the light of the evidence. No witness testified that an explosion of gas causes a loud report. No witness testified that the greatest force of a gas explosion would be felt in room 8 and in room 7, the adjoining room. No witness testified that the force of a gas explosion is expended in the direction of least resistance. The evidence is all directly to the contrary, so far as there is evidence.

Leaden testified

> " that a gas explosion does not make a loud noise; that, if the explosion had been occasioned by a gunning shot, the report of the gunning shot would have been loud, but if it was just a gas explosion it would be a kind of a dead sound." *(Trans., p. 57).*

Beck testified

> " that there was not at the time of the explosion any noise or report such as accompanies the explosion of gunpowder" *(Trans., p. 48).* "Also that he met after damp, which is a substance left in the air after a gas explosion, near room 13 of the third left entry and of the third left air course immediately after the explosion " *(Trans., p. 47).*

Fletcher testified

> " that gas explosions travel against the air " *(Trans., p. 88),* " while powder explosions expend their force in the direction of least resistance " *(Trans., p. 88).*

Alexander, a man of much experience with explosive gases, testified

> " that in his opinion the explosion was caused by the ignition of fire damp and that it originated in room number 8 of the fourth left entry " *(Trans., p. 51).* He also testified " that the greatest force of the explosion was, to the best of his recol-

lection, expended in rooms 16 and 17 or rooms 15 and 16" *(Trans., p. 52).*

Duggan testified that he would not expect to find in a gas explosion, pure and simple, indications of the greatest heat and violence at the place where it started, but very near to it, because the force would increase right shortly after it was ignited *(Trans., p. 205).*

On page 43 of their brief counsel say:

> "The statement on page 20 that there is no conflict between the witnesses on the first proposition—that there was a body of water in the fourth left air course which extended within three inches of the top—is without justification in the evidence. The only testimony to that effect was 'appearances of water mark' some time after the explosion had taken place, and, *therefore, more properly attributable to changes due to the explosion.*"

This is an inference of fact to be drawn from the testimony of the witnesses. No witness testified that the water mark referred to was "properly attributable to changes due to the explosion." On the contrary, Ray testified that "on the afternoon of the explosion he waded into the water in the fourth left air course up to his armpits, and could not get through it" *(Trans., p. 37).*

Merchant testified, immediately after the explosion, he, in company with others, "tried to get into the fourth left through the back entry [the air course], and they came to the water there and could not wade through it. We then came back and went into the top entry again and followed that until we passed the water that lay in the bottom entry [the air course], and then went through the crosscut back into the bottom entry and followed it as far as they could without being overcome by the after-damp; that he waded into the water up to his waist or a little deeper" *(Trans., p. 42).*

Alexander testified that "he was a member of the Coroner's Jury, and went into the mine a few days after the explosion with the other members of that body, accompanied by Mr. Fletcher, Mr. Duggan and another person whose name he thought was Ray:

> "That they traversed the fourth left back entry until they came to an obstruction, which was a body of water, which he

tried to go through and waded in until the water began to run over the tops of his boots and estimated that he was not half through when he turned and came out ; that the boots were wading boots, which came up twenty-six or twenty-seven inches ; that at the point where he turned to come back the entry appeared to be about four feet wide at the top " *(Trans., pp. 50 and 51)*; " that when they went around the water some one remained at the south end of the pool with a light, but he could not see the light directly over the water, but only the reflection of the light on the water, on account of the roof and the bottom of the entry forming a depression " *(Trans., p. 52)*.

Leaden testified that there was a fault in the air course which made a sag in both the top and bottom of the air course ; that after he went into the mine, after the explosion, Fletcher, Duggan, Brown and the Coroner's Jury went in ; * * * that Mr. Brown gave them all lamps ; that they went down to the fifth left ; went through the door and up through a room into the fourth left air course, and he went back along that course about 150 feet deep to the water, and Alexander walked into the water to the top of his boots, and then they returned and went up into the fourth left entry ; went past the water and came down in the air course, and Chambers held a light on this side and they saw the light across the water ; that where Alexander went in it was about three and one-half feet from his boots to the top ; that as Alexander waded in the water it was bound to get deeper, as it was a natural swamp, and he was on the upper edge " * * * *(Trans., p. 54)*.

He also testified " that there was a water mark on the low side of the air course which showed where the water had been, and was all along the low side of the air course about three inches from the roof ; that the air course was from five to five and one-half feet high and about nine feet wide, except at the fault, where it was about six feet " *(Trans., p. 53)*.

On page 43 of the brief it was said :

" The third proposition on page 21, that ' this body of water was allowed to accumulate because the appliances were not sufficient to take out all the coal produced to keep the mine free from water, has not the support of a scintilla of evidence and is wholly unjustifiable. The appliances, on the contrary, were

shown to be adequate and sufficient. It is difficult to understand why such unwarranted misstatements should be made. Can it be possible that, they imagine that if such misstatements be made, a court will not examine the evidence, but rest with the assertions that the evidence is sufficient to justify the statement,s and, therefore, conclude that there were sufficient conflict in the evidence as to the facts established to make the case one for a jury? Such a result would, indeed, enable the uncandid to profit by their disingenuousness."

Without attempting to quote the evidence *in extenso*, we submit that every witness—those for the defendant in error, as well as those for the plaintiff in error—who testified upon the point, agree that after the mine was double-shifted less water came out of the mine than before.

Ray testified "that Donohue told him that his orders were to hoist no water" *(Trans., p. 35)*.

Hunt testified "that his instructions were to hoist coal in preference to water, and that he only hoisted water when there was no coal to hoist" *(Trans., p. 155)*.

Rolando testified "that after the mine was double-shifted there was a great deal less water hauled than before. That, after the mine was double-shifted, his orders were to hoist water when he had no coal to take out" *(Trans., p. 46)*.

Merchant testified "that there was very little water coming out near the time of the explosion on his shift; that some of the water was taken from the bottom of the mine and some from sump near the sixth right; that the water coming out of the fourth left back entry siphon ran to the foot of the main slope; that he was sure of that for the reason that they *were not allowed to run that water down there for fear of drowning out the slope men*" *(Trans., p. 44)*.

On page 44 of the brief it is said:

> "Neither was there any evidence to justify the assertion on page 20 that the boy was blown through a door a distance of over seventy feet."

It must be admitted that no witness stated on the last trial of the case that "the boy was blown through the door a distance of over seventy feet," and it is probably true that the record does not

disclose with certainty where the boy's body was found. We must confess that in this particular our statement is inaccurate. We plead, in extenuation, the fact that this case was tried twice, and that upon the second trial some facts established on the first trial were assumed by both sides without controversy. Our recollection is that this was one of the facts which was thus assumed, but, as to that, we make no positive statement. If the statement is material to the Court's understanding of the case we are clearly convicted of error in regard to it.

As to the statement on page 42 of the brief:

> "On page 17, speaking of finding the bodies of Donahue, Flick and Kelly, it is stated: 'All three had the ordinary miners' lamps in their caps.' No page of the transcript is referred to, although immediately preceding a reference is made to paging as verification for other statements. After having carefully read all the testimony given, with a view of noting down the evidence on every material point, we do not remember of a single witness as having testified what kind of lamp there was in any of the caps of these three men when found after the accident, and no testimony was given to show what kind of lights they were using immediately before. The statement that they had the ordinary miner's lamps in their caps is, therefore, pure surmise."

We assert most positively that upon the second trial of the case there was no contention as to the character of the lights which were being used by Flick and Kelly and Donahue on the morning of the explosion. On the first review the Supreme Court of New Mexico, in its opinion, treated these facts as established and laid down certain rules of law as applicable thereto; upon the second trial the Court, in its charge to the jury, charged them as to the law of the case, based upon the ignition of gas by Flick and Kelly, and counsel for defendant in error asked two instructions involving the proposition that Flick and Kelly entered room eight with naked lights. The Supreme Court of the Territory upon the last review said:

> "The theory of the prosecution as to the cause of the explosion is the same now as then—to wit, that owing to an accumulation of water previous to the explosion in a low

> place in the fourth left air course a sufficient quantity of pure air was not going to the face of the workings in the fourth left entry to remove and expel the noxious gases; that Kelly and Flick, who were the company men—that is, men paid by the day and not according to what work they did—acting under instructions from Donohue, the day pit boss, went with him, or by his direction, into room eight to remove a railroad track, carrying naked lights, and that such lights set fire to the gas which had accumulated there by reason of the insufficiency of air and caused the explosion" *(Trans., pp. 276, 277).*

The questions propounded by counsel on each side of the case to the various witnesses show that they assumed that Flick and Kelly carried naked lights. Indeed, the whole record shows that the point was never in dispute on the second trial, and also that the use of safety lamps by any other persons than the fire boss was noticeable and exceptional in mining.

If there is no evidence upon which the jury could conclude that Flick and Kelly used naked lights on the morning of the explosion, instructions No. 6 and No. 11 given at the request of counsel for the defendant in error are clearly erroneous, because each of those instructions assumes that fact.

We have not attempted to set forth all of those parts of the brief of counsel for defendant in error in which our conduct is condemned and our motives questioned, for the reason that it would seem to be unnecessary to do so. We do not desire to be understood as admitting any statement made by counsel by reason of our failure to call attention to it in this reply brief, but we ask leave to direct the attention of the Court to the statement contained on page 108 of their brief as follows:

> "In the Supreme Court of the Territory there was only a general assignment that the Court erred in admitting improper evidence, or in refusing to admit proper evidence. For this reason, if no other, the alleged errors should not be considered."

The assignment of errors filed by us in the Supreme Court of New Mexico is made part of the transcript in this case and will be found on pages 266 to 270 inclusive, of the transcript. It there ap-

pears that the first ten assignments relating to the evidence are in the language used in the first ten assignments of error in this Court, found on pages 278 to 280 inclusive, of the transcript with the exception that the reference to the pages of the transcript are changed and after each assignment is added the words "and the Supreme Court of New Mexico erred in refusing and failing to consider such action in the District Court as erroneous."

II.

We admit that only errors, occurring at the trial, can be considered by this Court.

If we understand correctly the proposition attempted to be laid down in Point I. at the top of page 45 of the brief of counsel for defendant in error, it is that it is incumbent upon us to show that error of law intervened at the trial of this case in the District Court to entitle us to a reversal, and thus understood we admit it to its fullest extent. We assume in this Court the burden of showing not only that the reasons assigned, by the Supreme Court of the Territory, for its affirmance of the judgment of the District Court, were erroneous, but also the burden of showing that the result—the judgment of affirmance—is erroneous as matter of law.

If the record in the Supreme Court of the Territory disclosed no error on the part of the trial Court the judgment was properly affirmed, and it matters not that the reasoning by which that result was reached may have been erroneous.

If upon the whole case the facts disclosed by the record were legally insufficient to support a verdict in favor of the plaintiff in error in the trial Court, this Court will affirm the judgment of the Supreme Court, even though it may appear that errors were committed on the trial, because none of the other errors complained of were sufficiently prejudicial to the rights of the plaintiff in error to entitle her to a new trial, and a new trial would necessarily result in another verdict against her.

If, however, the evidence given on the trial, with the inferences which a jury may lawfully draw from it, was legally sufficient to

support a verdict in favor of the plaintiff in error, this Court should examine the entire record and all errors assigned (as well as any plain error not assigned, if any such there be) in order to determine whether or not error of law did intervene at the trial.

If the Supreme Court of the Territory reached a correct result, the reasoning by which that result was reached is not material. In no other sense do we contend that this Court can review the action of the Supreme Court of the Territory.

It is said on page 45 of brief for defendant in error that there are twenty-nine assignments of error made in this Court, and there were eighteen assignments of error in the Supreme Court of the Territory. This is a mistake ; there were twenty assignments of error in the Supreme Court of the Territory instead of eighteen, as stated. We attempted in the original brief to present the various assignments of error relied on, with our views in support of them, and we have no desire to add to what we have there said.

III.

We admit that we cannot succeed in this Court, if upon the evidence the cause of the explosion is mere matter of conjecture or speculation.

Counsel for defendant in error devote that part of their brief between pages 46 and 63 to an elaborate discussion of the proposition that, if the evidence, on the trial of a case like this, is so inconclusive as to render it impossible to say with reasonable certainty that the explosion was caused by the negligence of the defendant in error and that such negligence was the direct, proximate cause of the accident there can be no recovery. This proposition we admit. We admit it, however, with this qualification—namely, we insist that the evidence must, in order to be legally insufficient, be so inconclusive that all reasonable men will agree that it is impossible from the evidence to determine that the negligence of the defendant in error was the direct, proximate cause of the injury.

We admit that it is not sufficient to show that it is more probable that the injury was caused by the negligence of the defendant

in error than by a cause for which the defendant in error would not be responsible, but we insist that we have shown in this case facts from which the legal inference of negligence on the part of the defendant in error is irresistible.

(a) An accumulation of gas in room eight in the fourth left entry.

(b) An accumulation of water in the fourth left air course which, ten days or two weeks before the explosion, obstructed the circulation of air in the fourth left entry to such an extent as rendered necessary the opening of a stopping to let air in to the men on the plane of the fourth left entry.

(c) That the explosion was a gas explosion. (This proposition is established by the conditions found in the mine after the explosion; by the after damp which went up in the third left entry; by the fact that the explosion was unaccompanied by any noise or report, and, indeed, by every fact and circumstance in the evidence.)

(d) The discovery of the gas by fire boss of the defendant-in-error and failure to remove it, together with knowledge on the part of the day foreman of the existence of gas in room eight, and of the obstruction in the air course, and want of knowledge on the part of the intestates of plaintiff-in-error on these points.

We do not believe that circumstances like these can be overcome by the suggestion that it is impossible to tell what caused the injury, or that in any just sense, evidence of this character can be said to furnish no more than ground for speculation as to the cause of the explosion.

If there is in the case any point upon which there was a conflict of evidence, this Court will, of course, as to that point, and for the purpose of determining the legal sufficiency of the evidence, consider that the jury accepted the evidence of the witnesses for the defendant-in-error rather than our own, but we repeat our contention that there is no conflict between the witnesses as to any material point in the case, and that on the evidence taken as a whole, with the inferences which a jury can lawfully draw from it, a verdict for defendant in error cannot be allowed to stand.

If, however, this Court finds itself unable to agree with us to the full extent of our contention, that on the whole case a verdict for defendant in error cannot be allowed to stand, we yet submit that there was evidence legally sufficient to support a verdict in favor of the plaintiff-in-error, and that prejudicial error has been committed, which entitles the plaintiff-in-error to a new trial and to have the facts submitted to another jury, under proper instructions.

IV.

The intestates of the plaintiff in error did not assume the risk of an obstructed air course and accumulation of a dangerous body of gas in room eight of the fourth left entry.

The evidence conclusively establishes that the deceased had no knowledge of the accumulated gas in room eight or of the obstruction, by water, of the fourth left air course. It also establishes that they had no means of knowing of the existence of these conditions and we contend that the entire argument, pp. 63 to the top of page 95 in the brief, is met and overcome by the decisions of this Court in numerous cases cited and quoted from in our brief, especially the *Grand Trunk Railway Company vs. Cummings, 106 U. S. 701, and The Tex. & Pac. R. R. Co. vs. Archibald, 170 U. S. 672.*

V.

Section 6 of the Act of Congress relied on was not complied with by defendant in error.

On page 95 of their brief counsel say :

> " In the instructions of the Court the attention of the jury was directed to the provisions of an Act of Congress

approved March 3, 1891, 26 U. S. Stats. at Large, P. 1104, but no point was made upon this statute in plaintiff-in-errors' brief in the Territorial Supreme Court. *For the first time is the statute seriously urged in this court.* Neither is any count in the declaration in terms based upon such statute, it being nowhere alleged that the acts or neglect complained of were 'contrary to the form of the statute in such case made and provided,' *nor was any particular proof offered that the mine was of a depth of one hundred feet or more.*"

Taking the last sentence of this paragraph first we refer to the testimony of the witness Porterfield and to the map on file with the transcript.

Porterfield testified that he was acquainted with the mine at the time of the accident; that the fire boss necessarily traveled four miles and 2,066 feet to make an inspection of it, and the map on file shows that the main slope was about 3,000 feet deep. The depths of the excavation of the various entries were also given, and it is shown, according to the present recollection of the writer of this brief, that the fourth left entry was excavated a little more than eighteen hundred feet from the slope, while the fourth left air course was about 150 feet shorter; yet it is said that there was no *particular evidence* that the mine was of a depth of 100 feet or more.

Each declaration concludes with the words: "wherefore, an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided."

This was intended by the pleader to refer to Territorial statute under which the actions were brought, but the language is clearly broad enough to include in its terms the Act of Congress as well, if it were necessary to plead the Act of Congress in the declarations, but the trial Court took judicial notice of the Act of Congress, and charged the jury as to its legal effect, and we did not at the time object and cannot now complain, as we could not in the Supreme Court of New Mexico, that the charge of the Court with reference to the Act of Congress was more favorable to the defendant in error than it should have been; the suggestion that we for the first time seriously urge the Act of Congress in this Court is novel to say the least.

An examination of the Act of Congress in question will disclose the fact that Section 6 is the only section which in any manner affects this case.

Plaintiff in error claims no right to recover damages from defendant in error for the violation of an Act of Congress. She seeks to recover damages for the wrongful death of her intestates and unless that wrongful death was in some manner connected with the violation of the Act of Congress she would have no concern about it and would not be heard to complain of its violation.

The Act of Congress is material in this way, and in this way only. In the absence of legislation the common law liability of defendant in error to use reasonable care to provide a reasonably safe mine is undoubted, but what would be a reasonably safe mine under all the circumstances of the particular case would be for determination by the jury, as a fact.

When Congress, in the exercise of its undoubted authority, enacted this act and said by section 6 that certain things should be done, the question of whether the failure to do the things required by this section would or would not be evidence of negligence (or negligence *per se)* ceased to be a question for a jury, and is determined as matter of law.

An examination of the cases, in Pennsylvania and elsewhere, cited and relied on by counsel for defendant in error will disclose the fact that the statutes under which those cases were decided differ materially from the act of Congress and that their reasoning is not applicable to the case at bar. We make no contention that the Act of Congress changes the common law rules with reference to fellow servants. Our contention is that the section in question points out certain things which the mine owner can neglect, only at his peril. If the mine owner neglects to do the things required in section six and no person is injured thereby, the only complaint of such neglect must come from the mine inspector or other official mentioned in the act, but if the mine owner neglects to do any one or more things prescribed by the section and injury results therefrom to any person, the person injured (and in case of death his personal representative under statute) may recover damages for such injury, and in such case the mine owner cannot be heard to say that the failure or neglect to do the things required created no liability.

Two questions arise: First, Were the requirements of section six of the act of Congress met in this case? Second, Was the failure to do any one or more of the things required by the act of Congress the proximate cause of the injury to the intestates of plaintiff in error?

If the first question be answered in the negative and the second in the affirmative, the liability of defendant in error is established. No violation, however, of the Act of Congress which was not the proximate cause of the injury to her intestates, would entitle her to recover.

In our view, the statute does not in any sense make the master the insurer against the negligence of fellow servants. It makes the master liable to the servant for the master's negligence, and, as is said in the Cummings case, if the negligence of the master contributes to the injury, the fact that the negligence of a fellow servant also contributed does not relieve the master from liability.

VI.

Unless the evidence taken as a whole is legally insufficient to support a verdict in favor of the plaintiff in error, the rulings of the District Court upon the evidence and upon the motion for a new trial are properly reviewable on this record.

We do not desire to add anything to what we have said in our first brief on these points, further than to say, as we said in our first brief, that if the conclusion of the Supreme Court of New Mexico is correct, and the evidence is, as matter of law, legally insufficient to support a verdict in favor of the plaintiff in error, she has not been prejudiced by the action of the trial Judge in his rulings upon the evidence and upon the motion for a new trial.

If, however, the evidence was not legally insufficient, and if this record properly shows that the trial Judge failed to exercise a legal discretion possessed by him in passing upon the motion for a new trial, we submit that, under the authority of the Clyde Maddox case and the other cases cited in our original brief, this constitutes error of law, for which plaintiff in error is entitled to a new trial. If, as seems to be the position in the Supreme Court in the Territory, plaintiff in error cannot recover in this case unless she can produce an eye-witness who saw the explosion start and can tell

from personal observation where and how it was occasioned, a new trial would avail her nothing, as it is admitted on all hands that every man who was in position to see this explosion, lost his life at the time it occurred, and no eye-witness can be produced.

We insist, with all deference, that the rule laid down by the Supreme Court of the Territory is not in accordance with settled legal principles, and that for that reason its judgment should be reversed.

Respectfully submitted,

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F. W. CLANCY,
Of Counsel.

No. 269.

Brf. of Dunlap & Kenna for Def.

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Supreme Court of the United States.

OCTOBER TERM, A. D. 1899.

No. 269.

JOSEPHINE DESERANT, Administratrix of the Estates of Henri Deserant, Jules Deserant and Henri Deserant, Jr.,
Plaintiff in Error,

vs.

CERILLOS COAL RAILROAD COMPANY,
Defendant in Error.

In error to the Supreme Court of the Territory of New Mexico.

Brief and Argument for Defendant in Error.

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IN THE

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STATEMENT.

As we did not receive plaintiff in error's brief in time to prepare our own, we have been obliged to prepare this brief mainly in view of the one filed by plaitiffn in error in the Supreme Court of the Territory. Since certain unwarranted and erroneous conclusions of fact were stated in the brief filed in the Territorial Supreme Court, and also the one filed in this court, and are repeated, we prefer here to make our own statement of the facts and call attention to evidence in support of the material questions, referring to the *marginal* pages of the printed transcript.

Three actions were brought to recover damages on ac-

count of the death of plaintiff's husband and two sons working with him, caused by an explosion of some kind or other at or in the neighborhood of room 16 in the fourth left entry of the mine where the deceased were working as coal miners at the time, and in which entry-way they had been working for some time prior to the accident, having worked in these mines nearly a year. (Tr., p. 51.)

Plaintiff's theory, or rather assumption (for it is without support from any fair consideration of the testimony), is that the explosion was caused by ignition of gas permitted, it is claimed, to accumulate at the upper end of room 8, due to a want of sufficient air current, claimed to have been obstructed by a body of water in the passageway of the fourth left back entry and before reaching room 8 in question; that two workmen, named Flick and Kelly, had been directed by, or had gone with, the pit boss Donahue (also killed by the explosion) to take up a track in room 8, which room had been finished a few days before; and that these men, or one of them, in violation of well-known orders and the custom in that mine, had passed over and disregarded a plain and well-known danger signal placed in this room, and had gone beyond such signal for some purpose or other and, using naked lights, had ignited gas. But how the explosion occurred in fact no one can tell. It is altogether a matter of surmise and conjecture.

The negligence, as claimed, was in permitting the air course in the fourth left back entry to be obstructed by such a body of water as would render ventilation insufficient in the rooms off the fourth left entry, finished and unfinished, so that it is claimed there was not a sufficient current passing through room 8 to carry off the gas. As

found, however, by the Supreme Court of the Territory, the evidence did not sustain this position, but was decidedly to the contrary.

The system of ventilation in itself was perfect and afforded more than twice the amount of ventilation prescribed or generally deemed necessary.

The mine and its workings are described in the testimony of J. C. Porterfield, and his testimony will be easily comprehended by following the map of the mine.

The main slope or entry into the mine was driven down on the seam of coal, with the dip thereof at an angle of from twelve to fourteen degrees, and extended a distance of about twenty-five hundred feet. On each side of the main slope, and at a distance of thirty or forty feet, there was also driven along with the main slope parallel slopes, leaving a body of coal. At short distances while these slopes were being driven, as will be seen, cross-cuts were made through the bodies of coal between the main and the parallel slopes; and as a new cross-cut would be made through, the old cross-cuts were boarded up in the center of the pillars and sand and dirt thrown up upon each side, so as to make them air-tight and prevent as much as possible the passage of air through the same, thus making an air channel or course along the main slope. (Tr. marg. p. 328.) Commencing near the top and going down as the work of excavating coal proceeded, and at distances of about one hundred and fifty or two hundred feet from each other, and on either side of the parallel slopes, a pair of entryways would be driven together at right angles to the main slope and upon the seam of coal for quite a distance. There would be a body of coal between these entryways about thirty feet thick, and at distances of seventy feet or more this body

would be cut through by a cross-cut of the same width as the entryway; and whenever a new cross-cut was made through which air would be carried, the old cross-cut or last one would be boarded up in the center, and dirt, slate and refuse filled in on either side, so as to fill up as much as possible the old cross-cut and prevent air from passing through the same. (Tr. p. 328.) These entryways were numbered, as "First right," "Second right," "First left," "Second left," etc., depending on the side of the main slope in which it was located. The lower entry would be designated as the "Back entry," or air course, and would necessarily be lower down according to the dip of the coal than the upper or main entry parallel thereto. In driving these entryways a man and car would be necessary to take out the coal excavated in making them, and the cross-cuts, so that they were usually about nine feet wide and the height of the thickness of the coal, which was in the neighborhood of six feet. Off from the upper or main left or right entryway they would proceed, beginning at the slope, to excavate coal by making rooms, and these rooms would extend up to and at least one of them through into the preceding back entryway which had been driven. A room would be started from the upper entryway by excavating a passageway about nine or ten feet in width for a short distance, known as the "neck." They would then widen out the space, usually on the left side, so that an excavation about twenty feet in width would be made and continued until the room was finished. So it will be seen that a room would be driven and worked upward with the elevation of the seam of coal; and that the face of the room, where the men would be working in driving the room farther, would be the highest part of the room.

The system of ventilation was the best known, and had been approved by the governnent mine inspector, who made monthly tests to determine the quantity of air afforded to the men thereby. It consisted of a fan at the upper shaft which revolved so rapidly as to exhaust the air from the mine, so that outside air, with its well-known pressure of sixteen pounds to the square inch, would be forced down the main slope or main entryway to the bottom thereof, and then forced to each side of the mine, and by means of curtains, known as brattices, hung at appropriate places in the passageway, would be directed, so far as the left side of the mine was concerned, up through whatever openings had been made in the sixth left entry, going through the back entry, and then through the upper entry thereof, then conducted up through the fifth left back entry so as to reach every part thereof, and then around into the fifth left upper and through rooms in the same into room 1, which had been broken through into the fourth left back entry; then along the fourth left back entry as far as the same was driven, which was over a thousand feet from this room off the fifth left entry; then through the last cross cut into the fourth upper left entry, and by means of brattices hung from this cross-cut up to within several feet of the end or face of the fourth left upper entry, it was conducted around the face thereof; then on the other side of the brattice up room 18, which was just being driven; then into room 17, which was a new room; then through the upper cross-cut between 17 and 16 into room 16, and forced by these curtains up towards the face of room 16 as far as it had been driven; then it would go around the curtain in room 16 and through the upper cross-cut into room 15, and so on from room to room through the upper cross-cuts,

and by means of the brattices or curtains forced up towards or in the direction of the face of each room until it reached room 6, which was broken through into the third left back entry. Part of the air would then go into the third back entry, and the other part, by means of brattices, would be conducted through the other rooms of the fourth left entry into the rooms off the plane—that is, the rooms driven towards the main slope, and then it would be conducted around again into room 1 and through that room into another part of the third back entry. Then it would be forced into the various rooms off the third main entry, some of which were being still worked and some of which had been finished, and would then be forced into the rooms in the second main entry, and then into the first back entry, and then forced through an over-cast above the main slope or entryway, where it would meet the air returning from the right side and would then go up the shaft to the fan.

The fourth left main entry was driven about one hundred and fifty feet longer than and beyond the back entryway. Room 8 off the fourth left entry had been completed on Sunday night a couple of days before the accident, the explosion occurring Wednesday morning between half-past ten and eleven, February 27, 1895.

There would be more or less gas in the mine, and seams containing gas were likely to be struck by the miners while they were driving holes or blasting coal in making their rooms. (Tr. pp. 148 and 149.)

Duggan was the superintendent of the mine and had general charge of it. Donahue, who was killed in the explosion, was day pit boss, and Kilpatrick was night pit boss. There were two fire bosses under them, one Ray, who was the night fire boss (that is, he went on duty at

night), and one Dighton was the day fire boss, going on duty in the day time. The fire boss during each shift would go all through the mine, and particularly in the rooms which were being worked by miners, to ascertain whether any gas had accumulated in any of such rooms. As the next shift came on, the men in the same would pass by the cabin in which this inspector or fire boss was, and he would give the miners their lamps, either safety or others, and tell each one the condition of the room in which he was to work; and if there was gas in any room he would tell the miner who was to work there how to remove the same, giving him a safety lamp, or else instruct him to wait until he went down and removed it. There was also a general mine inspector, Fletcher, who made a general periodical inspection of this and other mines to determine their general safety.

If gas was found in any room beyond the little quantities which might be found in the uneven spaces in the roof, it would naturally be forced to or seek the highest place in the room, being lighter than the surrounding air. Gas would be usually removed from the working places by hanging curtains from the last cross-cut up towards the face of the room, which would force the air current up in that direction and around the brattice or curtain, and thereby carry off the gas with it up into the shaft and out of the mine. In order to insure the current of air going into the rooms and around the faces of the working places, curtains or brattices would be hung across the upper entryway a distance of fifty or one hundred and fifty feet apart, and as a mule and car would be driven through such entryway, while one curtain might be forced up thereby, the other curtains would be down, thus preventing a current in that di-

rection. Still, there would necessarily be a sufficient quantity of air in the upper entryway—and in every room, for that matter, and especially in the lower part of every room—to permit men and animals to work therein, as the gases would go to the highest point. The purpose of the air current was to remove or sweep out the noxious gases which might otherwise be inhaled by the miners, who would be working, as a rule, at the faces of their rooms. The water, if any, in the rooms would drain down into the entryway and pass into the lower or back entryway, and it will be noticed that in the fourth left entryway, about opposite rooms 4 and 5, there was a depression, but there were also depressions farther along, so that some water would accumulate in there, and especially along the lower side of the fourth left back entryway in different places and in different quantities.

A siphon was used to draw the water out of this sump or depression in the fourth left back entryway, and it passed down through room 1 in the fifth left entryway, and the water was then carried on down into a sump in the seventh left entryway. (Tr. pp. 292, 293, 299.) The fifth and sixth left entries were perfectly dry; so that all the water found in the sump in the seventh left would come from the fourth left back entry. (Tr. p. 301.) The evidence tended to show that this siphon was running up to the time of the accident, and that at no time was there any such quantity of water in the fourth left back entryway as prevented the passage and circulation of air through the same and into the rooms of the fourth and the third left of more than double the quantity of air required. The main testimony of the plaintiff as to the quantity of water was what appeared some days after

the accident, and from the appearances of a water-mark, when it was manifest also that the siphon had evidently been stopped by the explosion, that a great mass of dirt in the cross-cuts had been blown into the back entryway, and all the water in the back entryway, as well as ties and other refuse, were blown down the same into the sump, thereby necessarily increasing the height of the water. (Tr. pp. 156, 157.)

With reference to room 8 it appeared, as stated, that on Sunday night, scarcely three days before the accident, the room was being finished up; the air circulation was good; there was scarcely any gas in the room, and the two miners working there were working with naked lights, having their safety lamps hung up, so that the brattice extended as far as it was then sufficient to force the air current to the face and carry out with it any gas generated in the room. The brattice in that room was in good condition at all times when inspected and extended to a distance of about ten feet from the face. The distance from the last cross-cut between rooms 8 and 9 to the face of room 8 was a little over 110 feet, and brattice extending from the lower side of the cross-cut up toward the face would be about the same length.

Ray, the fire boss, was a witness for the plaintiff, and testified that the last time he visited the fourth left air course was Tuesday night immediately preceding the day of the accident, but he did not visit the faces of rooms from 5 to 11, because they had all been finished and he did not deem it necessary. The last time he visited the face of room 8 was on Monday night preceding the accident. He then says he found a little gas extending back ten or eleven feet from the face of the room. That is, he would find it on the roof or ceiling about ten feet from

the face, which would show that there might be a wedge-shaped body of gas extending between a horizontal line ten feet from the face and the top of the roof, or only a small quantity in an uneven space in the ceiling. In accordance with the well-established custom and well-known rule or order (Tr. p. 149) of that mine, well-known to all the miners and to the deceased, he placed two fire marks or signals in the room, one *ten* or *twelve feet* above the cross-cut in question between rooms 8 and 9 and on the track, which would be at least seventy or eighty feet below the gas, and the other a little below the cross-cut, which would make it below the brattice and on the track. This signal consisted in placing upon a tie two X's, and usually the word "fire," and the name or initial of the fire boss, and placing the tie across the track. The understanding was that no one should go beyond this signal or mark with a naked light, as it indicated that gas might be encountered beyond that point. He says he reported the fact that the room was making gas to Donahue, the pit boss.

The room had also been inspected on Monday morning by Dighton, the other fire boss. He found a little gas in the room near the face and placed his fire-marks on a tie which he put a little above the cross cut. They did not deem it necessary to do anything more, as the room was a finished one. No miners nor anyone else were expected to go to work in it.

As stated, the cause or origin of the explosion is altogether a matter of conjecture and surmise. It is clear, however, that the greatest evidence or effect of explosion and of fire appeared in the neighborhood of rooms 16 and 17 in the entryway thereabout, and some powder cans were found exploded, and coal dust was found coked on some of the pillars and the back of a car, and a car loaded

with coal moved several feet off the track. The Deserants, it will be remembered, were working in room 16. It might have been caused, as the miners were getting their powder ready about that time to prepare their shots, by some negligent or accidental ignition of powder, which would instantaneously set fire to the coal dust, which more or less impregnated the air and the entry-ways, and to any particles of gas which might be found in the hollows or crevices; so that death would be caused either by concussion or by the afterdamp produced by the explosion. (Tr. pp. 121-4, 135, 336, 337, 340, 341, 383, 384.)

Again, the explosion might have been caused by some miner, in making his hole, suddenly striking a seam or body of gas which would be ignited by his light and thus ignite the powder near at hand.

Two men, ordinary laborers, known as Flick and Kelly, were found in room 8, Kelly's neck being broken, evidently by concussion. The one body was found in the cross-cut between rooms 8 and 9 with his feet towards 8; and the other body was found in the room near the cross-cut. The fire marks or danger signals were also found in this room, more or less blurred. The canvas brattice, of course, was found knocked down, as it was knocked down in the other rooms. Men were found dead in the entry-way near rooms 16 and 17 and in some of the other rooms up in that direction. A portion of the track in room 8, near the cross-cut and opposite thereto, had already been taken up.

Plaintiff's contention, without support of the evidence, is that Donahue, knowing that there was some gas in room 8 (assuming that the same had not been removed in the meantime), directed these two men to go into

that room with a naked light and take up the track, and it is assumed that these two men disregarded the fire signals and went with a naked light beyond the same and caused the gas in the room to explode. It is assumed by one of the miners in his opinion that it was a gas explosion, and that the explosion ran against the air, or through room 9 into room 10, into room 11, into room 12, into room 13, and so on into the entryway; whereas the plaintiff's theory is that the current of air was too feeble to take the gas out of room 8. Room 7 does not seem to have been affected, and the posts in room 8 were slightly scorched only for a short distance near the cross-cut, and only slightly in the cross-cut leading into room 7; but no disturbance is shown at or near the neck of the room or in the lower part thereof.

It is manifest that if the explosion were caused by the ignition of a body of gas in room 8, there being air in the lower part of the room and in the upper entryway adjacent, a combustion would have taken place between the air and the gas, generating a new gaseous body with such force, rapidity and volume that it would have gone in the direction of least resistance and certainly would have been felt the greatest in all parts of room 8 and in room 7, the adjoining room; and as there would be a sudden expansion caused by the combustion there would be immediately, and as suddenly, a contraction causing a loud report. Here should have been found the greatest effect of the force and violence. But it was not so. It was found in and near rooms 16 or 17. (Tr. p. 385.) A body found in the neighborhood of room 16 was found to be burned, while the bodies of Flick and Kelly in room 8 do not appear to have been burned, although the posts near the cross-cut and in all the cross-cuts leading into

the upper rooms to room 17 were more or less charred. But the greatest evidences of fire, so far as the charring and force and violence were concerned, appeared in the neighborhood of rooms 17, 16 and 15.

So plaintiff's case is dependent upon the assumption and the presumption, without support of evidence, that the accident was caused by reason of Flick and Kelly disregarding or not heeding a plain and imperative signal of danger (Tr. pp. 142, 179, 210, 233, 289); that Donahue had sent them into a place of danger with a naked light, and that the gas had not been removed from room 8, although Donahue had been advised of its being there; and that gas accumulated in room 8 and extended down to the cross-cut where the bodies of Flick and Kelly were found, because it is assumed the air current was obstructed by water in the fourth left back entry and thus did not carry the gas out above the brattice or at all.

A more rational and plausible presumption is that the explosion occurred in the vicinity of the place where the greatest effects appeared and were shown to exist after the accident, and that it was a powder explosion, which ignited or caused the coal dust to be stirred up and set aflame.

All the evidence shows the air current was good. The gas could not extend below the end of the brattice. The men when found were a hundred feet away from any possible gas, and it was not shown they were using *naked lights* at the time. So the bottom drops out of plaintiff's case.

There is direct and positive evidence that within half an hour immediately prior to the explosion, at the last cross-cut between the fourth left back and main entries, to

reach which the air would have to travel over the water which was claimed to be the obstruction, the volume and current of air passing through the fourth left air course was in every way good and of the same quality and force that was customarily passing through the mine, and which was sufficient to carry off all the gases in the mine, and which had carried off all gases generated in room 8 during the time that room had been worked. (Tr. pp. 281, 282.) Moreover, if the air current had been bad and deficient, Deserant, as well as the other miners working at the faces of their rooms in the fourth left, would be the first to notice the same, not only upon their lights, but the smoke of powder from blasting in their rooms would not be carried off, and they would have complained to the foreman. (Tr. pp. 147, 338.) The lack of a current itself would be manifest to miners working near the faces where it would have to pass. The evidence all shows that the operation, management and condition of the mine were in every way good, and had been good for a long time prior to the day of the explosion; that measurements of air taken by the defendant's employes and by the government mine inspector showed that the circulation of the air in the mine was good, and the means by which the air was circulated was also in good condition, and that no complaint of any kind as to the air current had ever been made. (Tr. pp. 105, 150, 186, 246; Tr. pp. 247, 268; Tr. pp. 279, 285; Tr. pp. 286, 302; Tr. pp. 303, 307; Tr. pp. 315, 348.)

It was further proved, though it is also self-evident, that with the usual air current passing into room 8 and around the brattice, gas could never accumulate below the end of the brattice from the face, because the gas would always go to the upper end of the room, and the

moment the volume spread down to the air current passing around the brattice it would be swept out with the air; so that if gas were being made in room 8 it could not extend down to the brattice, and, therefore, not beyond ten feet from the face. This would be a distance of at least ninety feet from the cross-cut where the bodies of Flick and Kelly were found. The cross-cut through which the air current passed was about nine feet wide, and the space between the brattice and the wall, in which space the air current would pass, would be a distance of about ten feet, and the volume of air passing through that space would go up around the upper end of the brattice and towards the face of the room.

Even if there was some obstruction due to water in the fourth left back entry-way, this would not prevent the usual volume of air from passing into the fourth left, because of the vacuum which was being created by the ventilating fan on the other side of the alleged obstruction. The force of the outside air pressing in to fill up the partial vacuum created would necessarily send the same volume over the obstructed course, but with greater velocity than if the entire back entry were wholly unobstructed. As a matter of mechanics this is manifest, and the evidence was to that effect. (Tr. pp. 222-225.)

For over a month, every day and night, water was hauled out from the seventh left, which was the place where the siphon emptied the water from the fourth left air course. (Tr. p. 300.) The siphon was seen working a number of times prior to the accident. It was the source of the water hauled out from the seventh left (Tr. p. 300.) There is not a scintilla of evidence in the entire record that this siphon did not and was not at the time of and prior to the explosion performing its entire duty. (Tr. pp. 285-302.)

The intestates knew this was a gassy mine, that gas was likely to appear at any time, and knew that their own room was making or was apt to make gas. (Tr. pp. 202-203).

Competency of Employes.

Not a particle of evidence was introduced as part of plaintiff's case tending to show that any employe at the time of his employment was incompetent or known to be so; nor was there any attempt to bring to the company knowledge of any failure to perform any duty by such emyloye after his employment. The main point taken was that it appeared from the defendant's witnesses that Donahue and the two fire bosses had been elevated to their positions within a couple of months prior to the explosion. Donahue was an old, experienced miner, and so were the other men. Their duties were not complicated or difficult of comprehension. The evidence showed that they understood what their duties were. It would be strange if the elevation of a man in the service of the company should be regarded as evidence of negligence.

The superintendent was a man in every way qualified and competent for the position he held. (Tr. pp. 14 2, 169.) He had superintended this mine nearly two years prior to the accident and showed that he was familiar with its workings. No negligence in any event is attributable to him as being the cause of the accident. In addition to the superintendent, there was employed a general mine inspector named Fletcher, who periodically examined the mine to see to the safety of the appliances and the method of ventilating and working the mine. The day pit boss, Donahue, was a competent man. There is not a word in the record against his com-

petency. (Tr. pp. 258, 333.) The night foreman was competent in every respect. The record shows that he performed every duty with which he was charged. (Tr. pp. 150, 186-217.) The fire bosses understood their duties and knew how to perform the same, and they performed every duty incumbent upon them, and were in every way competent for the positions they filled. (Tr. pp. 65–69, 247–268.)

We will briefly refer to the evidence of each witness pertinent to the main points, for it is all important to a proper understanding of this case to consider carefully the nature and character of the testimony given.

References will be to the side or marginal paging of the transcript.

Evidence for Plaintiff.

J. W. Ray, who was night fire boss in the mine at the time, having been such from January 1st, and having been an assistant fire boss in mines in the Indian Territory previous thereto, and who showed that he was thoroughly familiar with his duties, testified that when he was first shown around the mine and into the fourth left back entryway there was some little water in the depression, but he could not say how much; that there was always some water there, and there was also a siphon to drain the water out of that air course, though he paid no attention to ascertain whether it was running or not. (Tr. p. 60.) The water was in the neighborhood of between two and three hundred feet in length; so that, instead of going through the back entryway to get to the rooms in the fourth left to test them for gas, he would, after passing from room 1 in the fifth left entry, go up the back entryway to the main slope and then into the fourth upper or main entryway and down to the face of the same to the last working room--18. If water had been taken out of this place it would have shortened his run. (Note—But it

is evident this would not make a difference of more than five minutes, if that much.) He claims that he complained to Donahue about having too much work, and was promised an additional man shortly before the accident. His duties as fire boss were to go to every place where the men were or would be working and see that it was safe before they went in—that is, free from gas; and one of his duties was to hang brattice or canvas where necessary to turn the current of air. Wherever there was gas being made, if it was not carried out, he would place a fire-mark or danger signal at such a distance therefrom that the miner would see it in time so as not to pass over it with a naked light. (Tr. p. 61.) When he found gas in a working place he would give the coal digger a safety lamp, unless there was too great a quantity. (Tr. p. 62.) On Tuesday night before the accident he did not visit room 8 and several other rooms in the fourth left, because they were finished and he did not think it necessary. On Monday night, when he visited the face of room 8, he found a little gas extending about ten or eleven feet from the face, and *he put his fire-marks in the room, one about ten feet above the last cross-cut and the other below.* (Tr. p. 63.) He did not again visit room 8 or remove the gas, because there was nobody working there, and he says he was crowded with his work, but told Donahue that there was a little more gas there than usual. He was not again in room 8 until a week after the explosion; but on the day of the explosion, after he heard of the same, he went into the mine some time afterward and went into water in the fourth left air course almost up to his arm-pits. By hanging up curtains they succeeded in carrying air through the fourth left entry up to room 16, where they found a dead body. (Tr. p. 64.) They found another body in room 16, burned on the hands and arms. In room 13 they found another body not bruised or burned. *He was familiar with explosive gases and understood the duties of a fire boss, and if there had been any danger threatening the lives of workmen he would have removed it.* (Tr. p. 65.) It was his duty to put curtains so as to throw the air around the faces wherever there was gas, and he always

performed that duty. These brattices were put as near to the face as was deemed necessary to circulate the air in that neighborhood. *When he made his last inspection in the fourth left the brattices were in position as near as they could put them.* The miners knew that when he discovered explosive gases he would place his fire marks there. He did not remember whether he was in room 8 once or twice on the morning prior to the explosion. (Tr. p. 66). It was either Monday or Tuesday evening that he told Donahue that room 8 was making more gas than usual. Donahue's body was found in the cross-cut at room 11, but he did not see him until after he was taken out. On Monday night, when he last inspected room 8, the brattices or curtains were in position and there was a little gas between the last post of the brattice and the face, and this would be directly in the air current. *He put his fire-marks in this room ten or twelve feet above the last cross cut.* (Tr. p. 67.) He also put a fire-mark below the cross-cut. It was his custom to put three or four crosses and the word "Fire" and the date thereon, and such mark meant that men should not go into the place so marked. *This was the means adopted in the White Ash Mine to indicate to everybody that they should not pass that point, and this was known to everybody working in the mine.* He had noticed the pipe of the siphon in the fourth left entryway going around into room 1 of the fifth left and down the slope, but did not know how far the pipe extended, as he had nothing to do with it, and it might have been running prior to the explosion. (Tr. p. 68.) Water in the fourth left entry would run back into the lower air course and accumulate on the lower side. Other persons may have gone into room 8 after the last time he was there. He could not say how much water there was there (in fourth left back entry), and it was not on this account that he asked Donahue for assistance, though he claimed it was one of the things. (Tr. p. 69.) *He had fulfilled his entire duty as fire boss before the explosion.* He had marked room 8 because he knew the air would not carry all the gas out without extending brattice farther up. As that mine was operated he was not compelled to go back to room eight after he had put a fire-

mark there. (Tr. p. 70.) *He would not have allowed any miners to go to work if he believed any portion of the mine was dangerous. Gas is lighter than air and seeks the high places in the room*, and before gas could have filled room 8 it would have spread through every room along the entire entry. (Tr. p. 71.) After the explosion, when he went into room 12, he found a cartridge two and one-half feet long filled with powder. (Tr. p. 72.) This was about a week after the explosion. Men working in the fourth left air plane came out uninjured. (Tr. p. 73.)

JAMES MERCHANT was boss driver on the day shift at the time of the explosion, and was at the bottom of the mine. They tried to get into the fourth left where the explosion was, and by the use of curtains finally got as far as room 12, but were forced back. They then tried to go through the back entry and came to the water, but could not wade through and turned back to the main entry. They then crossed into the back entry beyond the water. This took some time. The cross-cuts had been blown out so that they could go through the same from the main to the back entry. It was his duty to see that rope-riders hauled the water when they had no coal to haul. *The water from the fourth left air course would run through the siphon pipe down through room 1 of the fifth left and through the parallel slope to the bottom of the mine.* (Tr. p. 75.) *There was a water bailer on the night shift to fill tanks at the bottom of the mine for the rope-rider to haul out.* Pit Boss Donahue had his head crushed. He saw evidences of the explosion on the plane of the fourth left—that is, near the slope. After the accident, it took them until late in the afternoon to get air to the face of the fourth left. (Tr. p. 76.) There was little water taken out on his shift. Some of it was taken from the bottom of the mine and some from another sump on the right side. *The water from the fourth left back entry siphon ran to the foot of the main slope.* (Tr. p. 78.) The "slope" (probably siphon) was running just before the explosion. (Tr p. 79.) They found smoke everywhere inside the door. (Tr. p. 80.)

J. C. PORTERFIELD testified that within two hours after the explosion he was at the siphon pipe and helped to carry water to put in the pipe. (Note—Evidently the top or cup had been blown off.) He had seen the pipe running before the accident, but could not tell how long. After the explosion he was at the lower end and turned on the valve, and the syphon started running. (Tr. p. 81.) Rule 17 provided that all employes were requested to report any unsafe places to the mine boss, who should at once have the same repaired, and permit no one to enter therein until it was put in proper condition, etc. (Tr. p. 81.)

PHILIP ROLANDO testified that he hauled water out of the mine, and there were water cars to haul water from three or four places, including the seventh left, from which a little water was hauled, and also from the foot of the slope. His orders were to hoist water when there was no coal to take out. He could not say how much water was taken out per day in January or February. He knew nothing about what was done on the other shift. (Tr. p. 83.)

J. W. BECK testified that he was a miner employed in the mine from January 4th. At the time of the explosion he was working in room 15, in the third left entry, when he felt the concussion, and was made deaf for a time. He encountered the afterdamp in the third entryway, but was finally rescued. (Tr. p. 84, 85.) He was never in the fourth left entry.

O. W. ALEXANDER, who operated some mines of his own, but on a small scale, testified that he visited the mine after the explosion as coroner's juror. This would be about five days after, on March 4th. (Tr. p. 90.) They went into the fourth left back entryway and came to a body of water. He waded in to the tops of his boots. They then went in to the upper entry and through the cross-cut to the back entry beyond the water, then through the same and into the upper entry at the end. They then went through the different rooms to room 8. Between room 8 and the last of the working

rooms, which would be 18, he saw evidences of terriffic explosion, also of fire on posts and timbers, and there was a strong smell of burnt rags. He gave it as his opinion that the explosion was caused by an ignition of firedamp, and that it originated in room 8. (Tr. p. 91.) (Note—This opinion is worthless as evidence, because it is based upon suppositions of fact which the witness assumed, not substantiated by the evidence; and the cause of the explosion is, moreover, not a question of expert testimony, but for the court to determine in the first instance under the evidence, and where there may be a conflict of evidence, if any, then by the jury.) He says that the fact that the explosion was of firedamp was shown by the tremendous force with which everything in that part was thrown about, he previously knowing of presence of firedamp in that mine. It was impossible, in his opinion, to have any other kind of explosion in that entry except a gas explosion. (Note—And yet he had not been in that mine for a year previous, and at this time, notwithstanding the water in the back entryway, the air was passing in a sufficient current through the last cross-cut and through the various rooms. The tremendous force was not manifested in room 8, but in and about rooms 16 and 17.) (Tr. p. 92.) Props were charred on the side towards room 9 and slightly charred on the side towards room 7. He did not go up to the face of room 8. In room 12 the force of the explosion seemed to have been stronger, and *the greatest force was spent or shown in rooms 16 and 17 or 15 and 16.* (Tr. p. 93.) The roof and bottom of the entry, where the water was, formed a depression. He claimed he saw no evidences of exploded powder, but found powder cans flattened. (Tr. p. 94.)

THOMAS LEADEN testified that he was a coal miner and member of a legislative committee to investigate the cause of the explosion. He had worked somewhat in the mine in 1893, and a little while afterwards in January, 1894; but had then only driven the fourth left entry in about thirty feet. He went into the mine with the coroner's jury five or six days after the explosion. They came up through a room to the fourth left air course, and

in that room they could see where the water ran down, and there were timbers, ties and things lying in the air course, washed down by the water. (Note—More probably blown down by the force of the explosion.) They came to water in this air course, but did not go through. One man stood on one side and the rest went around the upper air course through the cross-cut to the other side of the water, and they saw on the other side of the water a light held by a man remaining there. There was a water-mark on the lower side of the air course, which seemed to show where water had been, and it appeared about three inches from the roof on the lower side. The air course was about five or six feet high and nine feet wide, except at the fault, where it was about six feet wide. They went from room 18 as far as room 8, and then out. (Tr. p. 96.) The filling of the air course with water was what caused the accident, in his opinion. (Note —This is pure assumption on his part, as he knew nothing of the condition of the mine before the accident and failed to take into account that a lot of dirt, debris and all the water on the lower side of the back entry would be blown into the depression or sump, and thereby raise the height of the water there to a considerable extent.) The water extended for five or six hundred feet and seemed to be in one body, but the water they could not get past seemed to be about three hundred feet long, and there was water lying back on the low side. He saw the light held by the other man across the water. (Tr. p. 97.) He knew there was gas in the first left entry when he was driving it, and there was gas in the slope or course when he was driving that. (Tr. p. 98.) The length of the water in the air course was three hundred feet on the high side, but more on the lower side. (Tr. p. 99.) *Air in the second air course would have more impurities than it would in the fourth left air course, because it would have to first pass through the fourth left air course.* (Tr. p. 100.) An explosion flies against the air; and his theory was that the explosion occurred in the fourth left and flew against the air, and encountering water in the back entry blew out the stoppings. (Note—The evidence showed the stoppings were blown the other way,—back into the fourth left air course.) The explosion did not reach the third left en-

try. There were no obstructions in the rooms between room 8 and the rooms in the plane of the fourth left, but the explosion would naturally fly against the air and it would be coming with the air if it flew back that way. The explosion started in room 8, in his opinion, and flew back through all the cross-cuts, and they found burnt props showing it flew back that way to where the air was coming. Note—This theory fails to take into consideration the air which would necessarily be in the lower part of room 8, and also in room 7, as well as in the upper entry way.) (Tr. p. 101.) There was no trace of any flame from room 8 towards the slope. There was no indication of flame on the side of room 8 towards the slope. He examined the face of room 8, and *there was indication of flame for about fifty feet from the last cross-cut up towards the face.* It was more than fifty feet from the cross-cut to the face. (Note—It was over a hundred feet.) He examined all props in room 8 for more than fifty feet above the cross-cut. (Tr. p. 103.) The only place where he examined coal on the side of room 8 towards the slope was at cross-cut leading into room 7. The flame did not extend to the entry in room 8, as it would have to go one hundred and twenty-five feet to get there. (Note—Yet if it started in room 8 it would have to travel a great deal more than five or six hundred feet and in a tortuous passage to get to room 17 or room 18.) There were indications of flame in rooms 18, 17, 15, 12, 11 and 10, but *there were no indications of flame at the neck of room 8.* The force of the explosion did not go to the plane instead of to the face of the entry because it was a gas explosion, which goes against the air, and there must have been some air coming around in the direction of room 8. (Tr. p. 104.) (Note—According to chemical laws, combustion would take place wherever there was air to mix with the gas in proper proportion, and there would be air in room 8 and in room 7 and towards the plane.)

Evidence for the Defense.

Joseph Fletcher, mine superintendent and inspector of coal properties, arrived at the mine on Friday following the explosion and went down into the same. He also went down with the coroner's jury. When he first went down he found a car off the track in the fourth left entry. In room 17 there was evidence of a shot having been fired. (Tr. p. 109.) When the jurors went in (five days after the explosion) some of them started to walk in the water and then turned back and went to the further side of the water edge, where they could see a man hold a light or candle on the other side. *The stoppings in the cross-cuts between the main and back entries had been blown out and down into the back entry.* There were cans, debris and props scattered all along the entry. There were also little depressions in the entry where there was a little water standing from six to eight inches deep. (Tr. p. 113.) All the cross-cuts but the last one in this entry had been filled up *before* the explosion with dirt thrown on both sides of a wooden partition in the center of the cross-cut. (Tr. p. 114.) *Stoppings were blown down from the fourth left front into the fourth left back entry.* The fourth left back entry was nine feet wide and the thickness of the coal (Tr., p. 115); for in excavating the back entryway the coal excavated would have to be hauled through the same by the cars and mules as in other parts of the mine. (Tr. p. 117.) These cross-cuts were entirely filled up after they had been driven. *Sixty-six cubic feet of air per minute is sufficient for one man in the mine.* (Tr., p. 118.) For twenty-four men there would be required 1,584 cubic feet. They followed the air current and went into the cross-cut between rooms 7 and 8 on the following Monday. (Tr. p. 119.) At the face of the fourth left main entry they found canvas blown down. (Tr. p. 120.) *At room 15 there was a powder keg near the first cross-cut going up the room spread or blown up; also one about the mouth of the room. He thought there were two between that and room 16, and there were either two or*

three inside the car of coal which was on the track in the entry, but the car was off the track when he saw it, and there was coke on the back end of the car an inch thick. The air current passed by the car, but not against the back end. (Tr. p. 121.) Props were charred and there was coke on the car from dust, which would be carried with the flame. *Particles of dust would be coked traveling with the flame and would lodge in whatever they came in contact with.* He examined all props from room 16 up to room 8. As they passed through room 16 through the last cross-cut the props were charred on the side traveling outward, and as you would go up into where the face of the room was it would be charred up to the face of the room. The flame would go through into the next room and char the props and return down to the cross-cut, or up if the cross cut were above the inside cross-cut, and would then go up or down, as the case might be. Right back at numbers 9 and 10 it was the same way. He was up to the face of room 8. *The props above the cross cut in room 8 were not charred at all.* (Tr. p. 122.) He went through the cross-cut into room 7 and returned. In rooms 15, 16 and 14 he found boxes scattered and a cartridge standing in some room against the coal. *He had examined other explosions.* (Tr. p. 123.) *In his opinion this explosion was through powder ignited at or near room 16. There were no indications of a gas explosion.* (Tr. p. 124.) The ventilation of this mine was sufficient prior to the explosion. *Before the air could reach the third left back it would have to pass all the rooms of the fourth left from room 6 before it would reach men working in rooms on the third left.* (Tr. p. 128.) *Fan exhausted ventilation from the mine by causing a vacuum, drawing gases out with the air.* (Tr. p. 129.) Dip of coal measure twelve to fourteen degrees. The main slope was driven on full dip of coal. (Tr. p. 130.) *Exhaust of the fan was 48,000 to 50,000 cubic feet per minute,* (Tr. p. 131.) *If explosion occurred at 10:45 men would be loading their coal and preparing for firing shots—drilling holes, making cartridges and tamping holes ready to fire at noon.* A windy shot is where a hole is drilled too far in the solid, and where the one charging the hole gives too small a charge to per-

form the work. Not having powder enough to blow out the coal it blows out the tamping. *Flame would be produced from a gunning shot.* (Tr. p. 133.) He once saw the effects of such a shot previous to the explosion extending seventy feet. Two miners would be apt to have in one room twenty-five pounds of powder. (Tr. p. 134.) At the time he investigated after the explosion in the fourth left he found *powder cans rent open and blue cast over cans, indicating powder had been exploded. There was one at or near the mouth of room 12; one at or near the cross-cut in 15; three between 16 and the car; two in the inside between the car and rooms 17 and 18, near the cross-cut. As quick as the powder would explode it would produce flame, dust would rise in small particles in the air and be ignited.* (Tr. p. 135.) This would ignite gas if it came in contact. (Tr. p. 136.) If gas in room 8 were ignited above the last cross-cut and near the end of the curtain, it would fire all the gas in the room, the canvas would be blown down and scorched and the props would be charred. In room 8 he went up to tie set across, with fire boss' mark, about fifty or sixty feet above cross-cut. *Props were charred beside the cross cut, but up near the face the props were not charred at all.* (Tr. p. 137.) There was not a particle of gas in room 8 when coroner's jury was there. *Alexander made no inspection.* (Tr. p. 139.) He (witness) inspected this mine scores of times. (Tr. p. 140.) Duggan was competent superintendent. (Tr. p. 142.) He examined the roofs of rooms off the fourth left after the explosion. *The sides and roof of the fourth left had blue cast, showing flame had been through there.* The little coal in room 17, where that shot had been fired, showed that the back of the shot was left in, and very little coal was lying in the room. The fire boss leaves a mark after he inspects a room for gas. (Tr. p. 143.) Tie chalk-marked "XX" indicated danger. (Tr. p. 144.) Afterdamp results from powder explosion. (Tr. p. 145.) *The miners themselves would first notice if air was insufficient. If noticed, they would complain to foreman. If the air current was stopped, black gas would accumulate and take away the breath.* (Tr. p. 147.) If air

in the fourth left was obstructed the men working in the third left would notice the conditions sooner than in the fourth left, as the men in the third left would be short of air before the men in the fourth. *Men in drilling holes may tap a seam of gas, or in breaking in the roof.* (Tr. p. 148.) *If any man walked over a danger signal placed on the track, or passed such signals marked upon the coal, he would violate the orders in that mine.* He knew Night Foreman Kilpatrick over seven years (Tr. p. 149.) He was competent. (Tr. p. 150.) There was evidence of flame in room 8 above the second cross-cut. There was no flame above the tie. (Tr. p. 155.) *Props near the face of room 8 were not charred.* Evidence of explosion was plain on the side and roof of the fourth left entry. The stoppings of all the cross-cuts were blown back into the air course. (Tr. p. 156.) *The stuff would blow down the air course and fill up the entry.* (Tr. p. 157.) After the explosion there was not enough water in the back entry to obstruct the air. (Tr. p. 158.) *Effects of the explosion showed greatest force around rooms 17 and 18.* (Tr. p. 162.) *This seemed to be the origin of the explosion.* (Tr. p. 163.) Twenty-five thousand cubic feet of air would ventilate that mine, if carried to the faces. Four or five thousand feet would dilute or carry off any gases that were given off there. (Tr. p. 171.) If powder exploded in the neighborhood of room 16 or 17, there would be an instantaneous explosion of different quantities of gas in any part of the fourth left, and the flash would be as quick as lightning. (Tr. p. 176.) If there was no current of air at the face of room 8 there would be no current at the face of room 9, nor at the face of room 7. (Tr. p. 177.)

William Kilpatrick—night foreman and coal miner for over sixteen years. The White Ash was a gaseous mine. (Tr. p. 191.) There was very little leakage of air through the cross-cuts, as board brattice would be put up in the center and canvas placed over the same, and loose dirt and stoppings thrown up again t each side to make it air tight. (Tr. p. 191.) *He was in the mine six hours before the explosion.* He had been all over the mine, in every working place, going to work Tuesday

night at seven o'clock. (Tr. p. 192.) *He went through the fourth left that night, and the ventilation was good. He tested it in different places with a pit lamp and conversed with miners about it.* His duty was to examine all the working places and condition of the brattice in each place, and the circulation of air going around the same. (Tr. p. 195.) *On the night prior to the accident he inspected the air course in the fourth left back and also the air course in the cross-cut between the fourth left back and the main entry, and found the air good and same as it had been for several weeks prior.* (Tr. p. 196.) On the night prior to the accident he went up to the face of the fourth left main entry, one hundred feet from the last cross-cut. (Tr. p. 197.) He made such inspection every night at least once, and sometimes at important points two or three times, and in respect to ventilation made inspection every night. (Tr. p. 199.) On Saturday night preceding the explosion he made inspection for gas, taking the fire boss' place. He examined every working place in the mine with a safety lamp. He went into room 8 to the face. Brattice from the cross-cut up was in good condition. (Tr. p. 200.) He found gas in upper left hand corner of the room as you go into it from room 9, going up the track. There was a current of air passing around the curtain or brattice through room 8. This was the fore part of Sunday night. There were *two men working at the face of this room with naked lights.* (Tr. p. 201.) *There was good ventilation passing through the room, then carrying off the gas. Deserant and his two sons were working in room 17 at the time of explosion, and had been working in the fourth left the week preceding the explosion.* (Tr. p. 202.) One week preceding the explosion the eldest boy requested him to take safety lamp which had been given to them to test a cross-cut they were driving to connect room 16. He took the lamp and showed him a little body of gas and brushed it out. The father and brother were working there with him. They knew the means used in that mine to designate in a locality the presence of gas. (Tr. p. 203.) In making inspection his custom was to test air at the last cross-cut of the fourth left. (Note—This would be beyond the water and after the air had passed over it.)

Air current furnishes respiration for men and mules, and carries off powder smoke from the shots and noxious vapors generated in the mine. (Tr. p. 204.) *A hole drilled five or six feet, taking too large a grip of coal, not charged with enough powder or not properly tamped, will blow out tamping or powder and come in a sheet of flame out of the hole, making a windy or gunning shot.* The powder was taken in twenty-five pound kegs. (Tr. p. 205.) The fire boss would make a trip of inspection in three or three and one-half hours. He would indicate a dangerous place or presence of gas to miners by throwing a tie or piece of board across the track, marked "X" or "XX." (Tr. p. 209.) If this was in a working place the miner would have his instructions. *In any other place he would have no business to go over this dead line.* (Tr. p. 210.) If he found gas, he would go back twenty, thirty or forty feet from the face and put a tie or piece of plank across the track marked with his initials, date of month and year, and if there was much gas put "XX," if little "X." (Tr. p. 211.) *This custom and meaning was well known to the miners.* (Tr. p. 212.) When he heard of explosion he tried to get into mine. He went into the fourth left and bratticed cross-cuts, and drove the air ahead until they could get to room 10. (Tr. p. 213.) After the explosion, and after he was able to, he went into room 8, only as far as the top cross-cut between rooms 8 and 9. This was between two and three o'clock in the afternoon. The brattice was knocked down. (Tr. p. 214.) Room was strong with afterdamp. He saw a body lying in the cross-cut. He didn't take it out. There was a tie with fire mark on it almost in front of the cross cut, a little below, if anything. Several other ties had been torn up, and loose rails, and there was a sledge hammer and some tools lying in the cross-cut. (Tr. p. 215.) Ray's fire mark was on the tie. (Tr. p. 216.) *If there was an obstruction in the fourth left back entry the full volume of air would come into the fourth left, as the air belonging to the left side would travel over the partial obstruction with greater velocity,* probably with a loss by friction against the obstruction. (Tr. p. 222.) *But the same quantity of air would pass*

through if there was an obstruction. (Tr. p. 223.) *Air travels with a greater velocity in narrow places.* (Tr. p. 225.) There was always some water lying in a portion of the fourth left back entry, and he went around it. (Tr. p. 226.) This water came from working places in the fourth left. (Tr. p. 227) The men were working in the face of room 8 Sunday night; worked with *naked lights.* (Tr. p. 229.) The brattice then ran up ten to fifteen feet of the face of the room. The fire boss did not report any gas there after that. (Tr. p. 230.) Sunday night was the last night room 8 was worked. He had nothing further to do with it unless he got special orders from Donahue regarding finished rooms. (Tr. p. 236.) After the explosion he saw the body of Kelly lying in the cross-cut of room 8. He went into the room (the second time) straight from the main left entry. He did not go into the cross-cut. (Tr. p. 238.) Kelly was lying in the mouth of cross cut off room 8, his feet towards room 8, on the lower side of the cross-cut, lying as though he had fallen into the cross-cut from the room. *Did not see Donahue's body there.* He was four feet from Kelly's. (Tr. p. 239.) He saw Donahue's body brought out. He was badly burned in the face, as if he had been in considerable dust or some substance that had gone into his skin. He was black—so black it was quite a while before they could identify him. (Tr. p. 241.) *There was always a sufficient quantity of air passing around the face of the fourth left entry, and all the rooms through which it passed.* (Tr. p. 242.) The velocity of air is greater beyond the brattice at the cross-cut of the fourth left entry. (Tr. p. 243.) *Air current in room 8 Sunday night was good at the corner of the canvas, carrying off the gas generated there. The fact that there were dangerous places, and places where gas was generated, was known to everyone working there.* (Tr. p. 245.)

JOHN DEIGHTON, day fire-boss, examined all working places before miners went in. He went into all working places on the fourth left and examined for gas. The last time he was in room 8 was Monday morning before the explosion. He found some gas and put his mark up there. (Tr. p. 248.) *He put a danger mark above the*

last cross-cut on a tie —do not remember how many crosses. *He went near the face of room 8. The brattice was in good condition.* He was at the face of the fourth left that morning. (Tr. p. 249.) He inspected other rooms there and found a little fire-damp in two roome. (Tr. p. 250.) *He usually put up two or three danger signals at every inspection.* (Tr. p. 253.) *He put up danger signals in rooms where the Deserants worked. They were familiar with these signals.* (Tr. p. 254.) If there was gas in a working room, would tell the miner how to brush it out and sometimes assist him. *His business was to put up brattices and curtains, and he always performed that duty.* (Tr. p. 255.) When explosion occurred he was in the second left entry putting up curtains. (Tr. p. 257.) Donahue was a careful and competent man for his position After explosion he went into the fourth left entry. (Tr. p. 258.) The stopings in the cross-cuts between the main and the back fourth left were blown out. They put curtains across the mouths of the rooms and brought fresh air into the fourth left. (Tr. p. 259.) *He did not go back to room 8 after Monday morning because he considered it an abandoned room, and had the necessary fire mark up there. The ventilation was good before the explosion.* The door at the parting of the fourth left was closed when he went there after the explosion. (Tr. p. 260.) Inside of the door the room was filled with dirt. There was a car off the track, and the trapper boy lay in there about dead. On each side of the door it was filled with dirt and dust about two and one-half feet. The body of the boy and the car were outside of the door. (Tr. p. 261.) They went as far as room 10, then put up curtains on cross-cuts between two entries, then went through a cross-cut into the main entry and found a body. (Tr. p. 262.) *The props in and about room 16 were charred the most.* He went into that entry again at 9 o'clock the same night and took out Kelly and Flick's bodies then. (Tr. p. 263.) *He went into room 8 from the mouth off the main entry and found Kelly's body at the corner of the last cross-cut. Flick's body was opposite the cross-cut in the room.* He did not notice whether the bodies were burned. There was some

brattice lying down in that room. (Tr. p. 264.) The door in the fourth left entryway at the parting was not broken. (Tr. p. 266.) The trapper boy would open the door for the drivers coming through and keep it closed at other times. (Tr. p. 267.) *He noticed no difference in the ventilation on the morning of the explosion, when he made his inspection.* (Tr. p. 268.) *He had put up danger signals in room 17, where the Dexerants were working. Every man working in the mine knew what the fire boss' signal was. When he had placed signal in room 8 he had performed his full duty.* (Tr. p. 275.) He reported gas in room 8 to Donahue. (Tr. p. 276.)

ED SULLIVAN, mule driver in fourth left entry, on day of explosion was taking out cars from rooms 17 and 18. (Tr. p. 279.) *He came out at 10:30 a. m., and went to the fourth right, when he heard a noise.* (Tr., p. 280.) *He was at the face of the fourth left entryway at the last cross-cut and at room 18, and the air was all right at 10 o'clock and 10:20 a. m.* (Tr. p. 281.) *The draft from the current of air in the fourth left cross-cut between the back and main entries was so strong that it caused the light in his cap to blaze and blew it down in his face; so he took the light off his cap and held it in his hand.* (Tr., p. 282.) He met Donahue that morning inside the trap door in the plane. (Tr. p. 283.) This was when he made his last trip. He was then going in the fourth left main entry. He had seen Flick when going in once that morning at the mouth of room 8, but not as he was coming out. (Tr. p. 284.) *The condition of the air at 10:20 on morning of explosion and within half an hour thereof, as he found it, was same as it had been for fifteen or twenty days previous, and he would know whether the air was good or not.* (Tr. p. 284.)

JOHN HUNT was boss driver and superintended the hauling of water out of the entry. (Tr. p. 287.) *He hauled water out of the mine every night that he was boss driver.* He hauled it out in January and February. *He hauled from three to seven trips on the shift every night in February.* (Tr. p. 289.) *There would be eight cars to the trip. He never found any difficulty in the ventilation. Its condition was good.* (Tr. p. 289.) *The siphon in*

the fourth left back entryway siphoned the water into the seventh left. (Tr. p. 292.) *When the siphon was running it went into the sump in the seventh left.* (Tr. p. 293.) *He had no reason to believe that the fourth left air course was obstructed by water.* (Tr. p. 296.) Two crosses known among miners as the danger line, over which no one was to cross. (Tr. p. 297.) *There was no time in February while hauling coal out of the mine that he did not have time to haul water. If there had been such occasion he would have worked overtime.* In the second week in January he was put on one night as night boss and went through every entry. *He hauled water out of the seventh left entry every night in February.* (Tr. p. 298.) *This water came from the siphon in the fourth left to a sump in the seventh left.* (Tr., p. 299.) The siphon from the fourth left might have been running a week before explosion. He saw it running, but couldn't tell when. (Tr p. 300.) *The water running into the sump in the seventh left came from the fourth left siphon, as there was no water from the fifth or sixth, both being dry.* (Tr. p. 301.)

JOHN W. FLEMING, United States coal mine inspector for New Mexico, inspected this mine about every thirty days. (Tr. p. 302.) He was in the mine January 24th before the explosion. He took measurements of air in most places with anemometer. Donahue was with him. (Tr. p. 303.) Duggan accompanied him several times. *White Ash Mine was in very good condition.* (Tr. p. 304.) Measurements the last time before explosion above the split of the seventh right and left, 16,470 cubic feet per minute; on the seventh right, 4,462½ cubic feet; on the seventh left return, 9,100 cubic feet. At the fourth left last cross-cut there were 4,814 cubic feet. (Note—1,848 cubic feet would have been sufficient for number of men working in there.) At the third left connection with room 6, there were 9,120 cubic feet. (Tr. p. 305.) Air going into the mine, 42,120 cubic feet per minute. Where it returns from the right and left air courses, after going through the mine, it was 42,900 cubic feet. (Tr. p. 306.)

ROBERT MCKINLEY, a miner, was working in a room in the second left at the time of the explosion. The air was

sufficient for himself and two men working with him then. Crosses were used as fire danger signals. (Tr. p. 310.)

JAMES DUGGAN—superintendent one year and nine months before the explosion. (Tr. p. 316.) He knew how mine was ventilated and described the air course. (Tr. p. 317.) Fan, at the speed it was running, exhausted 30,000 cubic feet of air per minute. Impurities were carried out and fresh air forced in. (Tr. p. 318.) There were twenty-seven or twenty-eight men working in the fourth left and on the plane at the time of the explosion. The fan, running at the usual speed, made seventy-five revolutions per minute. (Tr. p, 319.) He was used to safety lamp. (Tr. p. 320.) Donahue was day foreman, whose duty it was to look after all the men, see that they attended to their duties, and about getting out coal and looking after the safe condition of the mine. (Tr. p. 321.) He started into mining when thirteen years old and had worked in mines and mills—all kinds of mines—for twenty-five years. He was familiar with every working place in that mine. (Tr. p. 323.) He made thorough inspection of all places in the mine, himself and the foreman, three weeks before explosion. This included every abandoned and working place accessible. Everything was then in good shape. The fire boss' duty was to make daily inspection of working places. (Tr. p. 324.) Marks were used by fire bosses to indicate localities where miners should not go, and were sign that no one should cross over, except fire boss with a safety lamp. The foreman might go over with a safety lamp and investigate. (Tr. p. 325.) The air was measured by himself every ten days with anemometer. *He took measurements February 9th* (Tr. p. 326), *also February 23d (three days before explosion), after working hours.* The main intake was then 28,700 feet; seventh left, 5,202 feet, etc. (Tr. p. 327.) Rooms from 12 to 18 in the fourth left were being worked at the time of explosion. (Tr. p. 330.) The water was taken out in water cars The rope rider had charge of taking out water. *There were no orders given to haul coal in preference to water.* (Tr. p. 331.) Donahue was competent. (Tr. p. 333.)

Heard of explosion about eleven o'clock. He went to mine and into fourth left, and remained in mine until 12 o'clock that night, until they got all the bodies out. (Tr p. 335.) He finally got into fourth left through last cross-cut. He assisted getting bodies out from the rooms. He found timber and props badly burned and scorched. Some canvas was burned and scorched. *Several powder cans were rent asunder and coal dust blown up from floor of room on end of cars partially coked. He was in rooms 16 and 17.* (Tr. p. 336.) *He there found coal dust coked, and props more burned in that vicinity than in any other part of the entry.* The stopings in the cross-cuts between main and back entry were blown into the air course from a point along rooms 14 or 15. The stopings there were good on the Saturday before, and the air as good as usual (Tr. p. 337.) *If the air became deficient it would be noticed by the miners from the effect on the flame of their lights, and powder smoke would remain around in their places. The miners would complain to the foreman then.* He examined the fourth left and rooms a week after the explosion with the coroner's jury. (Tr. p. 338.) There was water in the fourth left back. He went through all the rooms of the fourth left. (Tr p. 339.) *A car loaded with coal in room 16 or 17 was blown off the track. It weighed five thousand pounds. The greatest evidence of explosion was in the vicinity of room 16. The props in these rooms were more burned than in any other part. That was the only place he found coal dust coked,* and car loaded with coal moved several feet from the track. The explosion extended as far as room 8 and a little beyond and in the opposite direction to the face of the fourth left entry and returned or rebounded to fourth left back entry. (Tr. p. 340.) *There were seven or eight kegs of powder rent asunder. The kegs were of sheet iron and would weigh twenty-five pounds each.* (Tr. p 341.) There was fire boss' mark in room 8. He thought it was six or seven feet below the last cross-cut. It was slightly blurred or blotted out at the time. He saw it with the coroner's jury. There were tracking and ties directly opposite the cross-cut. (Tr. p. 342.) He familiarzed

himself with underground workings, etc. (Tr. p. 348.) There was water in the fourth left air course for three or four months, but not near the roof. There was a siphon pipe there. (Tr. p. 356.) It was Donahue's duty to know if water interfered with air (Tr. p. 357), and his duty to report it to him. There was more or less water in nearly all the air courses. There was a low place in there. (Tr. p. 358.)

He did not know there was gas discovered in room 8 Sunday night, extending ten feet. (Tr. p. 361.) *Fan was not running to full capacity when he took measurements February 23rd.* (Tr. p. 369.) He found some props in room 8 slightly scorched. The props up towards the face of room 8 were less scorched than those farther down. There was very little evidence of fire twelve or fifteen feet from the face of room 8. (Tr. p. 379.) There was none farther up to the face. (Tr. p. 380.) *His opinion powder exploded.* It was a combination of powder, coal dust and some gas. (Tr. p. 383.) *The explosion occurred when the men would be making up cartridges and handling powder. The powder being ignited would ignite coal dust, which impregnates air in coal mines, and if there was any gas it also would be ignited.* (Tr. p. 384.) He assisted in taking out all bodies except Flick and Kelly. (Tr. p. 388.) He was in the mine the eight days prior to explosion, except Sunday. If everything was in proper condition the current of air would carry out the gas in room 8. *The danger signal was sufficient protection.* (Tr. p. 406.) *Fire mark by fire boss was all that was necessary, in an abandoned place, if there was any gas* (Tr. p. 415.) *Room 8 was an abandoned place.* (Tr. p. 416.)

Plaintiff's Rebuttal.

Charles Kelly, the brother of Kelly who was killed, went to mine after explosion to find body of his brother. (Tr. p. 451.) *He found his body in the back entry of the fourth left, as he understood it. He did not know the number of the place where he was. He did not know a thing about the mine. He had never worked there.* There

were three bodies,—Donahue's, Kelly's and another man's. (Tr. p. 452.) His brother had his neck broken. *He couldn't tell how they were lying. He did not pay attention to how they were lying.* He was in a hurry to get his brother out. The first body he found was a stranger's; the next his brother's; the next Donahue's. The body of the stranger must have been five or ten feet from Donahue. He couldn't tell. Donahue was about five feet from brother. He went into the mine about a quarter after six Thursday (Tr. p. 453), the day of explosion Four other men were with him. He didn't know them, nor their names He had never met them before. He was there when they found Donahue's body. (Tr. p. 454.) His face was pretty black. He knew him. The men led him in. He didn't know the number of the places. They took up his brother's body and Donahue's at the same time. They took his brother's body out first. (Tr. p. 455.) He didn't go back after his bother's body was taken out. He didn't examine the condition of Donahue's body. (Tr. p. 456.) He paid no attention if they brought him up at once. He didn't know the names of any of the men with him. (Tr. p. 457.) *He had only been there a few days when the explosion occurred, and was a stranger.* They took Flick's body out first. (Tr. p. 458.) They got his brother's body out between half past eight and nine o'clock at night. (Tr. p. 459.)

Defendant's Rebuttal.

James Duggan testified that Donahue's body was brought out of the mine at four o'clock in the afternoon. (Tr. p. 459.) He could only recognize it by his clothing and cast of features. The bodies of Flick and Kelly were the last ones taken out. This was about eleven o'clock at night. (Tr. p. 460.)

John Deighton testified that Flick and Kelly's bodies were the last ones taken out. (Tr. p. 461.) He took them from the parting. They encountered Kelly's body first; then Flick's. It was between ten and eleven

o'clock at night. Donahue's body had been taken out before. He carried a safety lamp when they went into the room. Archie Chambers and others were with him. When they discovered the bodies of Flick and Kelly they did not discover Donahue. (Tr. p. 462.)

JAMES MERCHANT testified that he went into the mine at seven o'clock in the evening after the explosion. Donahue's body was then on the slope at the mouth of the fourth left entry. (Tr. p. 465.)

(Note.—It may be charitable to treat Kelly as being mistaken in saying he saw Donahue's body at all, or that he saw his brother's body till it had been removed from room 8. On the first trial the evidence showed that Donahue's body was found in the cross-cut between rooms 11 and 12, and no one pretended to testify he was near room 8 at time of explosion. This apparent defect in plaintiff's case was attempted to be remedied by calling Kelly in rebuttal, when, if his testimony was pertinent to plaintiff's case, he ought to have been called at the opening. He was a stranger there, and old friends of Donahue had great difficulty in identifying his body even after it had been taken out.)

SOME MIS-STATEMENTS BY PLAINTIFF.

On page 9 of opponent's brief it is stated that "no witness was produced who had seen the siphon working within a month of the explosion." This is in a large sense untrue, as will be seen from the foregoing abstract. While, perhaps, no living witness was at the lower end of the siphon who was able to testify as to any specific or definite date when he saw the water running therefrom, yet a number testified that it was running, and the best evidence of this was the fact that the water in the sump in the seventh left all came from the fourth left air course,

and the water from this sump was hauled out constantly on the night shift during that month and the preceding month. Donahue, who probably knew the actual condition, was dead. It is also stated that the "siphon required starting by hand." This siphon worked like the ordinary siphon. When once filled with water it continued to run until stopped by turning the valve or by some force or cause.

Again, on the same page, it is stated that the "water was within three inches of the top on the low side when the coroner's jury went in to the mine four or five days after the explosion, although the hoisting engne had been working night and day hauling water during all the time of that explosion and the going down of the coroner's jury." The latter part of the statement is without foundation in the evidence (marg. p. 378), and the former part is incorrect. One of the witnesses testified that when the coroner's jury went down into the mine he saw a water mark about three inches from the top on the lower side, but no witness testified that at that time the water was within three inches of the roof of the lower side. It appeared at this time that the stretch of water was about two or three hundred feet long, but it also appeaerd that for a month or more before that the stretch of water was about that length, and yet during all of that preceding time the evidence showed that the air current after passing beyond the body of water was more than sufficient, and the air current when the jury were in the mine was amply sufficient to ventilate the side they examined and the rooms off the fourth left entry.

The statement on page 12, that "the slope leaked more than 60 per cent before the air reached the bottom of it" is pure assumption and mere guess work.

The statement on page 13 under the "fourth" head that "if there had been no obstruction in the fourth left air course there would have been no occasion to open a stoping to allow the air from the upper air course to pass to the men on the plane of the fourth left entry," is fallacious, for it will be remembered that after the air passed through the rooms in the fourth left main entry and when it came to room 6 after having passed room 8 it was split up, a large part of it going into the third left back air course and the other part being diverted into the rooms off the plane, and from thence back into room 1 and thence into the third left air course, so that those rooms off the plane would never have as much air as had passed through room 8.

The statement on the same page that "the evidence establishes beyond a reasonable doubt that the obstruction by water of the fourth left air course and the accumulation of gas in rooom 8 of the fourth left entry combined to cause this awful calamity," is as disingenuous as it is brazen in view of the unanimous finding to the contrary of the Supreme Court of the Territory, and of all the evidence, as shown in our abstract, to the effect that the air current was at all times amply sufficient; and further, Deserant and other miners working at the faces of the rooms in the fourth left entry would be the first to notice whether the air current was good or bad, and yet no complaint appears to have been made by any of the miners as to the air current in that entry.

It will be remembered that Kilpatrick testified that in examining as to the condition of the air he usually talked with the miners themselves in regard thereto, though he also applied his own tests.

On page 15 of opponent's brief it is stated:

"On that Sunday night Kilpatrick, the night foreman, found two men working in that room with a *safety lamp.*"

The very page of the transcript referred to (page 122, marginal page 229), contains the following answer of Kilpatrick:

"On the seam on the top side of the room I filled the davy lamp. The men were working there with *naked lights.*"

It appeared, from other parts of his testimony, that their safety lamps were hung up in the room, not being used. It is difficult to understand why such a deliberate mis-statement should be made.

On page 17, speaking of finding the bodies of Donahue, Flick and Kelly, it is stated:

"All three had the ordinary miner's lamps in their caps."

No page of the transcript is referred to, although immediately preceding a reference is made to paging as verification for other statements. After having carefully read all the testimony given, with a view of noting down the evidence on every material point, we do not remember of a single witness as having testified what kind of lamp there was in any of the caps of these three men when found after the accident, and no testimony was given to show what kind of lights they were using immediately before. The statement that they had the ordinary miner's lamps in their caps is, therefore, pure surmise.

The statement on page 19 that "the evidence conclusively establishes that the explosion was caused by the ignition of gas in room 8 of the fourth left entry of the

mine" is, in view of the evidence to the contrary, set out in our abstract, unwarrantable and untrue. Neither was there any evidence to justify the assertion, on page 20, that the boy was blown through the door a distance of over seventy feet; and the theory that the force of the explosion, when it came in contact with the body of water in the fourth left air course, caused it to rebound back into the fourth main entry and then down the same, is as novel as it is crude. If the boy was blown through the door, as claimed, it would be more apt to have been caused by the explosion of the kegs of powder in the fourth left main entryway, the force of which explosion would be felt down that entryway somewhat similar to the effect of powder exploding in a cannon.

The statement on page 20 that there is no conflict between the witnesses on the first proposition, that there was a body of water in the fourth left air course which extended within three inches of the top, is without justification in the evidence. The only testimony to that effect was "appearances of a water mark" some time after the explosion had taken place, and therefore more properly attributable to changes due to the explosion.

The third proposition on page 21, that "this body of water was allowed to accumulate because the appliances were not sufficient to take out all the coal produced, to keep the mine free from water," has not the support of a scintilla of evidence and is wholly unjustifiable. The appliances, on the contrary, were shown to be adequate and sufficient. It is difficult to understand why such unwarranted mis-statements should be made. Can it be possible that they imagine that if such mis-statements be made, a court will not examine the evidence but rest with the assertions that the evidence is sufficient to justify the

statements and, therefore, conclude that there was sufficient conflict in the evidence as to the facts established to make the case one for a jury? Such a result would, indeed, enable the uncandid to profit by their disingenuousness.

On page 67 the contention is made that because defendant in error asked the court to give certain hypothetical instructions somewhat based upon the plaintiff's theory as to the cause of the explosion, defendant must be held to admit that there was evidence sufficient to support this theory. Such an argument is puerile. Defendant's request for a peremptory instruction had been everruled. Very frequently the lawyer, out of an abundance of precaution, after the court has ruled against his views, asks instructions in view of his opponent's contention, although he may be satisfied in his own mind that such contention is wholly without foundation in the evidence.

BRIEF AND ARGUMENT.

I.

ONLY ERRORS OCCURRING AT THE TRIAL CAN BE CONSIDERED BY THIS COURT.

There are twenty-nine assignments of error made in this court, and there were eighteen assignments of error in the Supreme Court of the Territory. From the twenty-second to the twenty-ninth assignments, inclusive, findings or statements of the Territorial Supreme Court are questioned. Had we time it would afford us pleasure to demonstrate that they are all correct; but this court can only consider in an action at law errors committed by the *nisi prius* court, and in this case only the errors, if any, occurring at the trial. It could not even review, if such a case were presented, the action of the trial court in refusing to grant a new trial because of preponderance of the evidence one way or the other.

Chicago, B. & Q. R. Co. v. *Chicago*, 166 U. S., 242–246.

II.

AS THE EVIDENCE WAS INSUFFICIENT TO JUSTIFY A RECOVERY IN FAVOR OF THE PLAINTIFF, THE DEFENDANT BEING ENTITLED TO A PEREMPTORY INSTRUCTION, NO PREJUDICIAL ERROR COULD HAVE BEEN COMMITTED OF WHICH PLAINTIFF CAN COMPLAIN, EITHER IN THE INSTRUCTIONS GIVEN OR, INDEED, IN THE RULINGS ON EVIDENCE.

It is very clear that if, under the evidence, the plaintiff was not entitled to recover, she could not have been prejudiced, in a legal way, by any instruction which was

given by the court, nor, indeed, by the admission or rejection of any evidence which did not tend to sustain or establish a right to recover. The court, when called upon, will therefore examine the entire record, as was done by the Supreme Court of the Territory, since all the evidence has been preserved, to see whether the plaintiff has been prejudiced by any ruling of the trial court.

West v. *Camden*, 135 U. S., 508.

We shall first show that under the evidence the plaintiff was not entitled to recover, and in conclusion shall examine the different errors assigned and show that they are without foundation.

III.

THE PLAINTIFF COULD NOT RECOVER UNDER THE EVIDENCE FOR THE FOLLOWING REASONS, ANY ONE OF WHICH IS CONCLUSIVE:

FIRST. IT WAS INCUMBENT ON PLAINTIFF TO SHOW BY THE EVIDENCE NOT ONLY THAT THERE WAS NEGLIGENCE IN SOME RESPECT OR PARTICULAR, BUT THAT THE ALLEGED NEGLIGENCE WAS THE DIRECT AND PROXIMATE CAUSE OF THE ACCIDENT. IF THE CAUSE OF THE ACCIDENT OR EXPLOSION IS A MATTER OF CONJECTURE OR SPECULATION, PLAINTIFF HAS FAILED IN HER PROOF. THE EVIDENCE DOES NOT SHOW THAT THE ALLEGED DEFECTIVE CONDITION OF THE AIR PASSAGE IN THE MINE, OR THE ACCUMULATION OF ANY EXPLOSIVE GAS AT ANY PLACE IN THE MINE, WAS THE PROXIMATE CAUSE OF THE ACCIDENT WHICH CAUSED THE DEATH OF PLAINTIFF'S INTESTATES.

It is clear from a review of the evidence that the cause of the explosion was unknown and is merely a matter of

speculation. To sustain the plaintiff's theory and contention it is necessary to assume and presume (*first*) that the fourth left air course was so obstructed by a body of water that a sufficient current of air did not pass through the same and into the rooms off the fourth left, including room 8, so as to carry out noxious gases if any in room 8. The evidence of plaintiff is based solely on the condition of this air course after a violent explosion had taken place, when it is but reasonable to assume that there was also a change in the conditions caused thereby. For the defense it was shown the ventilation and air current were ample and not affected by any obstruction. (*Second.*) Plaintiff must assume and presume that such a body of gas accumulated at the face of room 8 as to extend below the brattices—indeed down to the cross-cut where the men were found—and that this was due to a lack of air current; (*third*) that Donahue, the pit boss, had not caused this gas, if any, to be removed prior to the accident, but with knowledge of the same had sent two workmen, Flick and Kelly, into the room with naked lights to take up the track —the legal presumption being that Donahue had performed his duty, had used due care and had not given a negligent order;—(*fourth*) that Flick and Kelly, the workmen, or Donahue himself, had gone into room 8 with *naked lights*, and did not use safety lamps as required, as otherwise there would be no danger of explosion from the gas, if any; and that they had deliberately disregarded the well-known and plain danger of fire signals placed in this room, and ignited the gas by bringing a naked light in contact with same, which could not extend down to any of the signals if there was any air current at all; and that this caused the explosion. The burden of proof being upon the plaintiff, in the absence of

evidence, it is to be presumed that these danger signals would not be disregarded by the men and that they would not go in except with safety lamps; (*fifth*) that because two nights before the accident a little gas was found in the upper part of room 8 about ten feet from the face, but evidently not extending down to the brattice, gas continued to be given off in the meantime from some seam in that room, without exhausting such seam or reservoir containing the same, until such quantity of gas had accumulated and filled the upper part of the room down to the cross-cut and below the brattice. This assumes that there was such a seam or reservoir containing a sufficient quantity of gas to fill the room to that extent, and also that there was no air current passing through that room. When examined by the coroner's jury the room was not making gas, apparently.

If there was an air current—and all the evidence is to the effect that there was, and that the alleged water in the fourth left back air course did not obstruct it—then at least the gas could not have extended below the end of the brattice in room 8, as any air current would at least have carried out the gas extending to the end of the brattice. Does plaintiff claim that the men went up to this gas and ignited it? If so, she would have to say that they were knocked back to the cross cut where found, a distance of from eighty-five to ninety feet. This would not be plausible. Does plaintiff contend there was no air current, and that therefore the gas extended down to the cross-cut and the men ignited such gas about the place they were found? If so, how was it the men were able to take up the track in the room opposite and in the vicinity of the last cross-cut? Would not the explosion have occurred immediately when they went into the room

at this cross-cut, and certainly before any track was taken up opposite the cross-cut, and in this room? If these men commenced to take up the track beginning at the neck or mouth of the room, then they necessarily passed by the danger signal placed by Ray across the track below the cross-cut. If they commenced taking up this track at the upper end they would have passed over the danger signal placed by Ray on the track ten feet above the cross-cut, and then if it was a gas explosion in this room, it should have occurred before the track was taken up down to the cross-cut. The burden was on plaintiff to show just what was done. But the air current was good. Plaintiff's theory is not consistent with the facts.

Again, the only rational view is that if there was an explosion of gas in room 8, and that was the origin, we would find in that room the greatest effects thereof afterwards. The truth is, the greatest effects were found in and about rooms 16 and 17, where powder was found to have been exploded; and the rational theory is, that as the men would be handling their powder about the time of the explosion some of the men, either accidentally or negligently, started a powder explosion in that neighborhood, or it was started there by some miner in having struck a seam of gas and igniting it with his light.

The court will at this day take judicial notice of physical laws in considering the evidence.

It is elementary that in an ordinary case of negligence one of the chains in the plaintiff's proof necessary to be established is that the alleged negligence was the proximate cause of the injury, and this must be established.

Shearman and Redfield on Negligence (4th Ed.), Sec. 25.

In the Nitro-glycerine case, 15 Wall., on page 537, Mr Justice FIELD said:

"A party charging negligence as a ground of action must prove it. He must show that the defendant by his act or by his omission has violated some duty incumbent upon him, which has caused the injury complained of."

Ordinarily the connection between cause and effect is easily established, and no question arises; but mere negligence never becomes actionable until it is shown by the proof to be the cause of the injury.

In cases of carrier and passenger, where a passenger is injured, it is sometimes presumed to have been caused by the negligence of the carrier, because the carrier undertakes for pay to transport the passenger safely, and the very fact that the passenger is not transported safely in many cases raises a presumption of neglect of duty, as where the injury could only have occurred by reason of something occuring within the control of the carrier.

But this is not always true. See the often approved case of *Daniel* v. *Met. Ry. Co.*, L. R., 3 C. P., 216-222, approved in Exch. Chamber, L. R., 3 C. P., 591.

In *Spencer* v. *C. M. & St. P. Ry. Co.*, 81 N. W., 407, it was held by the Supreme Court of Wisconsin, in January, 1900. where a stream of water entered a car window injuring a passenger, that the verdict could not rest on speculation. guess or conjecture; and evidence of the accident was not sufficient to raise a presumption of negligence; that you could not found a conjecture on a conjecture; or as this and other courts have stated, you cannot base a presumption on a persumption.

United States v. *Ross*, 92 U. S., 281.
Douglas v. *Mitchell*, 35 Pa. St., 440.

In some cases, also, where one not in contractual relation with another is injured through a cause which appears to be within the control of that other, as where a person walking along a street is injured by something falling out of a window, as such things do not usually occur except through some fault, there is a presumption of negligence connected with the accident; but in the majority of cases, as between strangers, there is no presumption of negligence.

Where, however, a servant is injured through the alleged negligence of the master, inasmuch as the servant is paid to take risks incident to the manner in which the business is conducted or as he may know it to be conducted, there can be no presumption in his favor that the injury which he suffers was occasioned by the default of the master or that the master was negligent—that is, did not discharge his duty—the presumption being the other way.

The reasons are set out in the well-considered case of the *Atchison, T. & S. F. R. Co.* v. *Wagner*, 33 Kas., 660; approved in *Atchison, T. & S. F. R. Co.* v. *Ledbetter*, 34 Kas., 326. And see *Flippin* v. *Kimball*, 31 C. C. A., 285.

In a case of this nature, therefore, the burden is upon the plaintiff, not only to show that there was some negligence, but in order to make this negligence actionable or culpable it must be shown that such negligence was the cause—indeed, the direct and proximate cause—of the injury. It is said that a mere conjecture, built upon a bare possibility, will not suffice to transfer the money or property of one man to the possession and profit of another; and this rule should certainly have its full force and effect where the presumptions, if any, are against the

plaintiff. While it is true that inferences may be drawn from the testimony, yet if the inference to be drawn is one necessary to establish an essential link in the chain of proof, it is manifest that the inference so to be drawn must be the only rational and fair one which may be drawn from the evidence. The burden being upon the plaintiff, therefore, where it appears that the cause of the injury is conjectural, it is clear that the plaintiff has failed in her proof; for it is well settled in a case of this nature that if two different inferences or conjectures may be drawn from the evidence, which is undisputed, the one having a tendency to show a liability and the other having a tendency equally strong to show there was no liability, the defendant is entitled to the presumption and inference in its favor. Liabilities are not imposed upon parties upon mere conjecture or speculation. The party seeking to recover damages must show that under the law and the evidence he is entitled to recover.

In *Hughes* v. *C., N. O. & T. P. R. Co.*, 91 Ky., 526; s. c., 16 S. W., 275, the action was to recover on account of the death of a brakeman. In descending a steep grade the train passed through four tunnels. He was last seen just before entering the first, and, after the train had passed all, was found lying on his back on the top of an unusually high foreign car. The back of his head had been crushed by striking some object He had passed over five cars since last seen. A brakeman could not pass the last tunnel while standing upon an ordinary car, nor the preceding tunnel on such a car as the one on which he was found. One of the crew saw the tunnel gang at work in the last preceding tunnel and noticed a new timber hanging by a rope. A verdict was directed for the defendant, which was affirmed. It did not ap-

pear whether he was injured by the low tunnel or the timber hanging down in the other one. The court said:

"One suing to recover damages for injury arising from another's neglect must offer some testimony conducing to show that it was so occasioned. Negligence cannot be presumed in a case like this one. The presumption is the other way. It cannot be found without evidence. The complaining party must not only show an injury, but also some evidence tending to show that the other party is to blame for it. * * * *Circumstances are merely presented upon which one may theorize as to the cause of the accident.* The burden of showing neglect rests upon the complainant, and under such circumstances he has offered no evidence tending to show it. *He has merely presented two or more states of case upon which one may theorize as to the cause of the accident.*"

In *Pennsylvania R. R. Co.* v. *Schertle*, 97 Pa. St., 450; s. c., 2 A. & E. R. Cas., 158, a brakeman was injured while attempting to couple a car to the tender of an engine, because, as alleged, the steps were imperfect in number and construction, and the spaces between the ties and sills were unfilled, so that the road-bed was rough and uneven and full of pits and hollows. The court said:

"As to how he fell, or the cause of his falling, there is not a word of evidence. The theory of the plaintiffs was that his fall was occasioned either by reason of the roughness or inequalities of the track or in an attempt to get on the tank; the allegation being that the step was defective, and that he missed his footing because of such defect. It appears from the evidence that the track at the particular point where the accident occurred was in the course of being repaired; that it had been raised a few inches, and the space between the ties had not been ballasted or filled in. * * * There was not, however, as before stated, a particle of proof that either the track or the step had anything to do with his death. * * * *The case was submitted to the jury without evidence, and the verdict has no better foundation than a guess, or almost mere possibilities. This will not do.*"

In *Hughes* v. *Oregon Improvement Company*, 20 Wash., 294; s. c., 55 Pac., 119, the injury was caused by fire breaking out in a mine. The cause was apparently unknown. The court said:

"But it is claimed by the respondents that it was negligence on the part of appellant to permit the fire to break out in the mine. We think, however, that they are mistaken in that regard. All that the proofs show is that the fire was discovered in a place where it could have been least expected, and which was carefully inspected the evening before. The origin of the fire is unknown, but the testimony of all the witnesses who testified upon the point, if true, shows that it was not the result of spontaneous combustion, or of any act imputable to the appellant. The mere fact that the fire occurred is not, in itself, proof of negligence. Bailey, Mast. Liab., p. 508; *Kuhns* v. *Railway Co.* (Iowa), 31 N. W., 868."

In *Southern Pacific R. Co.* v. *Johnson*, 16 C. C. A., 317 (C. C. A., 9th Circuit), it appeared that an engineer in the employ of the defendant was running an old and nearly worn-out engine liable to jump and sway. While running eighteen miles an hour he went out on a running board to close an injector valve which had stuck. He closed the valve, started to return, and while returning fell from the engine. The court said:

"There is an entire absence of evidence as to how Johnson fell from the engine, and the cause of his fall is involved in uncertainty and doubt. *That he was thrown from the running board by reason of the jarring of the locomotive is not the only and exclusive inference that the evidence is susceptible of*, as counsel for defendant in error contends. If it were the only reasonable inference that could be drawn, it might then well be said that the question should have been submitted to the jury to abide by their judgment and verdict. * * * *The general rule being that negligence cannot be presumed from the fact of the injury, though it may be inferred from the facts proved, it obviously cannot be based on guesses or conjecture.*"

In *Short* v. *Railroad Company*, 69 Miss., 828; s. c., 13 Sou., 826, it was said:

"The deceased was killed, and no one knows how. That is not enough to subject the railroad company to liability. Negligence must be shown."

In *Louisville Gas Co.* v. *Kaufman et al.* (1898), 48 S. W., 434, it was held that where it is just as probable that the injury was the result of one cause for which the defendant would not be liable, as of another for which he would be liable, the plaintiff cannot recover.

This rule was also applied in *Grant* v. *Pennsylvania & N. Y. Canal & R. Co.*, 133 N. Y. 658; s. c., 31 N. E., 220.

In *Manning* v. *Chicago & W. M. R. Co.*, 105 Mich., 260; s. c., 63 N. W., 312, it was claimed that the death of a brakeman was caused by reason of striking a tree which stood about eighteen inches from the side of the car. His cap was found near this tree, and the left side of his face, which might have been struck by it, was found bruised, and he was found run over a short distance from this tree. In the opinion it is said:

"*We think the cause of the fall from the train was purely conjectural.* * * * Whether he slipped on the gravel, fell in stepping from one car to another, or how or by what means he fell or was thrown off, is not shown. His face was as likely to be bruised by the fall as by striking against the tree. * * * If the jury could draw this conclusion from the evidence proved, they could as well draw the conclusion that the deceased in walking over the sand on the car slipped and fell, or in passing from one car to the next he fell between them."

In *Sorenson* v. *Menasha, P. & P. Co.*, 56 Wis., 338; s. c., 14 N. W., 446, it was said:

"Judicial determinations must rest upon facts, and legal liability must be determined by the law in application to facts."

In that case the intestate, an employe of defendant, was found bruised and dead in a hole which had been cut in the floor of defendant's mill and in which was water about six feet deep. Upon all the evidence it was held that there were no facts from which the question of negligence as causing the accident could be determined.

In *Chandler* v. *N. Y., N. H. & H. R. Co.*, 159 Mass., 589; s. c., 35 N. E., 89, it is said, with reference to such a case:

"There is an entire absence of evidence as to how intestate happened to fall to the ground, and *it is not enough to show that one conjecture is more probable than another.*"

In *Carruthers* v. *Chicago, R. I. & P. Ry. Co.*, 55 Kas., 601; s. c., 40 Pac., 915, deceased was last seen on top of a freight train, and while the train was crossing a bridge he uttered a cry of distress, which was heard by the brakeman. The train was stopped and he was found run over, lying across the west rail. The iron rods used for a hand-hold in going down the ladder were loose on one car. On the flange of the wheel of this car were found a clot of blood, a piece of flesh and a little fuzz or a piece of woolen cloth corresponding with the material in the coat and vest worn by the deceased. A verdict was directed for the defendant, and affirmed. The court said, referring with approval to an Iowa case:

"A theory cannot be said to be established by circumstantial evidence, even in a civil case, unless the facts relied on are of such a nature and are so related to each other that it is the only conclusion that can reasonably be drawn from them, and that it is not sufficient that they are consistent merely with that theory."

In *Smith* v. *C., M. & St. P. R. Co.*, 42 Wis., 520, the court said:

"The respondent's liability depending upon the carelessness or fault of its agents, employes or managers in some way, and the appellant's right to recover depending upon the same being clearly shown by the evidence, and it being his duty to furnish such evidence, it was certainly incumbent upon him to show *how and why the accident occurred.*"

In *Donald* v. *C. B. & Q. R. Co.* (1895), 93 Iowa, 284—s. c., 61 N. W., 971, it was claimed deceased fell from a train by being struck by a bridge. His body was found near to and a little east of it, and the train was going east. But the court held there could be no recovery because the cause of his fall was a mere matter of conjecture.

The same was held, under substantially the same facts, in *Borden* v. *D. L. & W. R. Co.*, 131 N. Y., 671; s c., 30 N. E., 586.

In *Wintuska's Adm'r* v. *Louisville & N. R. Co.*, 20 S. W., 819 (Ky.), it was alleged that deceased was knocked from a train by a ledge of rock which was too near the track. No one knew of the accident until the train had proceeded several miles. He was last seen on a car going to a flat car, to reach which he would have to descend a ladder on the side towards the ledge. The only wound was upon his right side, which corresponded with the ladder and ledge. His body was found in a cut where the ledge of rock projected. HOLT, C. J., said:

"It seems to us, however, that all this is mere speculation. Why not as well suppose that the deceased never came in contact with the ledge, but became dizzy or slipped in the darkness as he walked along the top of the car and fell off, the wound upon his head being caused by coming in contact with some hard substance as he struck the ground."

To the same effect see

Tyndale v. *Old Colony R. Co.*, 156 Mass., 503; s. c., 31 N. E., 655.

Chandler v. *N. Y., N. H. & H. R. Co.*, 159 Mass., 589; s. c., 35 N. E., 89.

Cotton v. *Wood*, 8 C. B. (N. S.), 568.

Phil. C. & P. R. v. *Henrice*, 92 Pa. St., 431.

B. & P. R. Co. v. *State*, 75 Md., 152; s. c., 23 Atl., 310.

Wheelan v. *C. M. & St. P. R. Co.*, 85 Ia., 176; s. c., 52 N. W. 119.

In *Geoghegan* v. *Atlas Steamship Co.* 146 N. Y., 369, s. c., 40 N. E., 506, it is said:

"There is no direct proof as to how the deceased met his death. There is nothing to show that he fell through the open port or that his exit from the ship was accidental. It is true a theory may be adopted which would lead to the moral conviction that his death was accidental while in the discharge of his duty and in the exercise of reasonable care, but all this falls very far short of sustaining the burden of proof under which the plaintiff rested."

In *Orth* v. *St. P. M. & M. R. Co.*, 47 Minn., 384; s. c., 50 N. W., 363, it is said:

"The burden of proof was upon the plaintiff to establish his contention; and 'proof' is logically defined as a sufficient reason for assenting to a proposition. * * * *It is not even enough that the evidence leaves the matter in equilibrio as to whether the injury was produced by a cause for which the defendant was responsible, or by one for which it was not responsible;* and *a fortiori*, no recovery can be had if it is more probable that it was produced by the latter."

So in *Quincy Mining Co.* v. *Kitts*, 42 Mich., 34, Judge COOLEY said:

"It may be guessed or surmised that there was negli-

gence somewhere, and one juror may guess that it was in a want of careful selection of timber, another that it was in a want of subsequent inspection or a want of care to prevent rocks falling on the bridge; but *the case affords no safe grounds for anything beyond conjecture; and if the master can be held liable under the circumstances which the record discloses, on mere guesses or inferences respecting the existence of fault somewhere, the rule that an employe assumes the ordinary risks of his employment will be wholly done away with.*"

The foregoing rule was applied by this court in *Railroad Company* v. *Houston*, 95 U. S., 702, for Mr. Justice FIELD concludes:

"Not even a plausible pretext for the verdict can be suggested unless we wander from the evidence into the region of conjecture and speculation."

A number of other authorities might be cited to the same effect, but it is sufficient to simply call attention to the rule in this court, as announced in *Bowditch* v. *Boston*, 101 U. S., 18, in which Mr. Justice SWAYNE said:

"In every case, before the evidence is left to the jury, there is a preliminary question for the judge, not whether there is literally no evidence, but whether there is any upon which a jury can properly proceed to find a verdict for the party introducing it, upon which the *onus* of proof is imposed."

He also says:

"It is now a settled rule in the courts of the United States that whenever, in the trial of a civil case, it is clear that the state of the evidence is such as not to warrant a verdict for a party, and that if such a verdict were rendered the other party would be entitled to a new trial, it is the right and duty of the judge to direct the jury to find according to the views of the court. Such is the constant practice, and it is a convenient one. It saves time and expense. It gives scientific certainty to the law in its application to the facts and promotes the ends of justice."

Southern Pacific Co. v. *Pool*, 160 U. S., 430, 440.

Two witnesses for the plaintiff, Alexander and Leaden, with nothing more than the qualification of ordinary miners, pretended to give their opinion, or rather surmise, as to the cause of the explosion, each stating that in his opinion it was caused by the ignition of a body of gas in room 8, and one of them stating that the supposed accumulation was caused by the air course in the back entry being obstructed. This is a new method of supplying deficiency in the evidence as to facts. Instead of reasoning from cause to effect the process is reversed. Whether the air course was obstructed or not was not a subject for expert testimony. It was an actual fact which required proof. This is also true as to whether there was any gas or any such body of gas in room 8 as was assumed by these witnesses. The cause of the explosion was an essential fact to be determined by the jury, if there was sufficient evidence on the point. It is not the function of expert witnesses to supply missing testimony, or supplant the evidence given, because it may be unfavorable, and establish this essential issue by their opinions.

These witnesses were not even present at the time the accident occurred, and the cause of the accident, therefore, could be determined by the jury, when the facts were disclosed, as well as by these witnesses. That plaintiff did not choose to use available witnesses to testify as to the air current or other matters is no reason for permitting her to substitute as proof of these facts improper conclusions or surmises in the way of opinions not rising to the dignity of evidence.

Maitland v. *Gilbert Paper Co.*, 97 Wis., 476; s. c., 72 N. W., 1024, 1027.

Briggs v. *Minneapolis Street Ry. Co.*, 52 Minn., 36; s. c., 53 N. W., 1019, 1020.

Milwaukee & St. Paul Ry. Co. v. *Kellogg*, 94 U. S., 469.

The New England Glass Co. v. *Lovell and others*, 7 Cush., 319.

Hoyt v. *Long Island Ry. Co.*, 57 N. Y., 678.

Van Zant v. *Mut. Ben. Ins. Co.*, 55 N. Y., 169.

Hughes v. *County of Muscatine*, 44 Ia., 672.

T., P. & W. R. W. Co. v. *Conroy*, 68 Ill., 560.

Roberts v. *C. & G. T. Ry. Co.*, 78 Ill. App., 527, 531.

Chicago R. I. & P. Ry. Co. v. *Sheldon*, 51 Pac., 809.

U. S. Mail Line Co. v. *Carrollton Furniture Mfg. Co.*, 12 S. W., 342.

Chicago & E. I. Ry. v. *Ross et. al.*, 56 N. E., 451.

If the explosion were caused by the ignition of fire damp in room 8, the greatest effects thereof would be found in that room. If caused by an explosion of powder and ignition of coal dust in room 16 or 17 or thereabouts, the greatest effects would be seen in the neigborhood of these rooms, and the flame would travel not only down the entryway, but through the upper cross-cuts which lead from one room to the other, and so along the opened traveled way of the inspectors along the air current or course. One of these witnesses gravely says the ex-

plosion would fly against the air current, and therefore from room 8 in the direction of room 1 through the upper cross-cuts in a zig-zag course; and in the same breath he asserts that the gas could only accumulate by reason of the air course being obstructed, so that there would be no air current to carry the gas out, above the brattice at least. The process of reasoning adopted by the one witness to come to this conclusion is somewhat as follows: the explosion occurred in room 8 because he assumes that gas was permitted to accumulate there on account of an obstruction in the air course in the fourth left, thus not affording a sufficient air current to take the same out. Then he again assumes that the fourth left air course was obstructed so that a sufficient current of air was not afforded, and thereby gas was permitted to accumulate in room 8. So he reasons in a circle. He ignores the fact of there necessarily being air in the lower part of room 8, for if the gas extended below the cross-cut leading into room 9 an explosion would have occurred the moment the men entered that cross-cut, and before they were able to take up any track at all.

At Blanzy, in France, several fatal explosions have been traced to the firing of coal dust from the flame of a shot, even in a case where no fire damp was present in the workings.

See Enc. Brit. (9th Ed.), American Revision, Vol. 6, page 73.

The fire-damp of miners is known as marsh gas or carburetted hydrogen. When mixed with from four to twelve times its volume of air, it is explosive; but is not explosive when above or below that percentage. In the latter case, when light is brought in contact with the same, it is only inflammable, burning brightly.

Enc. Brit. (9th Ed.), Am. Rev., Vol. 6, p. 72.

The so-called spontaneous combustion in coal mines which sometimes takes place is due to rapid oxidization set up when finely divided coal is brought in contact with air.

Enc. Brit. (9th Ed.), Am Rev., Vol. 6, p. 74.

So if there was a proper admixture of air in room 8, in the volumes above given, and an explosion occurred in that room, the effects would have been felt mainly throughout that room, and the main effects would not have been found in room 16 or 17, after a tortuous passage which the flame would necessarily have to go through had the explosion occurred in room 8.

An intelligent judge could therefore not be expected to pay any attention to the opinion of these two witnesses for plaintiff as to the cause of the accident. The court must determine whether this cause has been established by evidence and not surmise.

SECOND. NEGLIGENCE AS THE CAUSE OF THE ACCIDENT WAS NOT SHOWN ON THE PART OF SUPERINTENDENT DUGGAN. DONAHUE, THE DAY PIT BOSS, AND THE OTHER WORKMEN IN THE MINE—INDEED, INCLUDING THE FIRE BOSSES—WERE FELLOW-SERVANTS OF THE DECEASED. THEY WERE ALL ENGAGED IN CO-OPERATING TOGETHER IN THE OPERATION OF THE MINE; SO THAT DECEASED MUST HAVE UNDERSTOOD THAT IN PERFORMING THEIR WORK THEY WERE LIABLE TO BE INJURED THROUGH THE NEGLIGENCE OF THE OTHER WORKMEN CARRYING ON THE GENERAL UNDERTAKING, AND THEY THEREFORE ASSUMED THE RISK OF BEING INJURED THROUGH THE NEGLIGENCE OF SUCH OTHER WORKMEN, THAT BEING A MATTER AGAINST WHICH THE EMPLOYER DID NOT UNDERTAKE TO INDEMNIFY THEM.

Plaintiff contended before the Territorial Supreme Court that Flick and Kelly—and indeed, Donahue—went into room 8 through the cross-cut from room 9, in order to take up the track in room 8; and that the gas was ignited by naked lights used by them—the gas, it was contended, being suffered to accumulate by reason of an insufficient air current caused by an assumed obstruction of water in the fourth left air-course. This assumes on their part that after Donahue was notified of there being gas at the face of room 8, he himself went in with the other men or directed them to go in with naked lights (when they might have used safety lamps), and that they disregarded or walked over the danger signals and thus came in contact with the gas and ignited the same. It appeared, however, that at the time of the explosion a portion of the track above this last cross-cut had already been taken up and the tools for taking it up were at hand, presumably being used. If plaintiff's theory be correct, the explosion ought to have occurred before the men succeeded in taking up any of the track in that locality, and if the air current was so poor that it would not remove the gas from this room and the gas was still accumulating, as is claimed, it would have extended down to this cross-cut and be ignited immediately on the men entering room 8 through the same.

However, assuming that the explosion was so caused, the company had used means to notify all parties of the presence of gas in this room sufficient for the purposes, as the room was not being then worked by the miners and the method adopted was well known to the deceased. So that there would be no culpable negligence attributable to the company in respect to gas in room 8, so far as the deceased were concerned. And as Donahue, Flick and

Kelly, according to plaintiff's theory, were working in the mine in removing the track, they were engaged in performing the duties of ordinary fellow workmen, and if they or any of them were negligent it would be the negligence of fellow workmen. Indeed, we may go further. As the condition of the mine was changing from time to time and as it was necessary that the fire bosses should do work in extending brattices in view of the changing conditions, they were simply co-operating in the general work of operating this mine.

FELLOW SERVANTS AND RISKS ASSUMED BY SERVANT.

The relation between the parties being contractual, it is plain that the servant's action must be based upon the assumption that the master has agreed to indemnify the servant against the injury sustained; that is, the master has guaranteed that the servant would not be injured by the causes complained of. Is this assumption sound—the master himself not being personally to blame?

As the decisions on the liability of the master to the servant injured in his employment, and the doctrine of fellow servants, are so conflicting and irreconcilable (it being held by one court, but only one, that it is always a question for the jury to determnine whether two workmen are fellow servants or not), it would seem that one would arrive at a more rational conclusion by examining a few of the leading cases in which the question of liability was first discussed. Some courts seem to be influenced rather by the fact that the master is more likely to be able to respond pecuniarily for the damage than the fellow servant causing the injury, than by the reasons or principles upon which the liability is to be rationally founded.

Prior to 1837 no precedent could be found which held the master liable to the servant injured while in his employ, and the first cases distinctly announced non-liability. The leading case, as is well known, is *Farwell* v. *Boston & Worcester Railroad Corporation*, 4 Metc., 49, in which Chief Justice Shaw, with his usual clearness of expression, first set forth the reasons which, when once stated, were apparent to everyone, because they were based upon the nature of the relation of the parties. At the outset he showed that the relation was necessarily one of contract, in which the servant was paid to assist in the undertaking of the master, and the respective duties and obligations were therefore to be determined by what might be fairly implied from such a contract. The case was therefore entirely different from that in which a stranger received injury through the neglect of a servant while engaged in the business of his master. He says:

"The general rule, resulting from considerations as well of justice as of policy, is, that he who engages in the employment of another for the performance of specified duties and services for compensation takes upon himself the natural risks and perils incident to the performance of such services, and in legal presumption the compensation is adjusted accordingly. And we are not aware of any principle which should except the perils arising from the carelessness and negligence of those who are in the same employment. These are perils which the servant is as likely to know, and against which he can as effectually guard, as the master. They are perils incident to the service, and which can be as distinctly foreseen and provided for in the rate of compensation as any others. To say that the master shall be responsible because the damage is caused by his agents is assuming the very point that remains to be proved."

He then proceeds to show that there can be no differ-

ence whether the servants are in the same department of duty or not. He says:

"When the object to be accomplished is one and the same, and the several persons employed derive their authority and their compensation from the same source, it would be extremely difficult to distinguish what constitutes one department, and what a distinct department of duty. It would vary with the circumstances of every case. * * * Besides, it appears to us that the argument rests upon an assumed principle of responsibility which does not exist The master, in the case supposed, is not exempt from liability, because the servant has better means of providing for his safety, when he is employed in immediate connection with those from whose negligence he might suffer; but because *the implied contract of the master does not extend to indemnify the servant against the negligence of any one but himself*, and he is not liable in tort as for the negligence of his servant, because the person suffering does not stand toward him in the relation of a stranger, but is one whose rights are regulated by contract, express or implied. The exemption of the master, therefore, from liability for the negligence of a fellow-servant does not depend exclusively upon the consideration that the servant has better means to provide for his own safety, but upon other grounds. Hence the separation of the employment into different departments cannot create that liability, when it does not arise from express or implied contract, or from a responsibility created by law to third persons and strangers for the negligence of a servant."

He concludes with a caution that there may be implied warranties in the undertaking, such as the goodness and sufficiency of machinery used; but as such question was not in the case it was not decided.

The next case worthy of consideration is the often approved one of *Bartonshill Coal Company* v. *Reid*, 3 MacQueen 266, in the House of Lords, which was heard by Lord Chancellor Cranworth in June, 1856, but which he had under consideration for two years; in the meantime

the Maguire case having been argued before him and his successor, Lord Chancellor Chelmsford, and Lords Brougham and Wensleydale. The case was not altogether dependent upon English law, but rather involved the application of general principles, since it involved for the first time an administration of the Scotch law on the subject, and was therefore considered from an original standpoint. Chief Justice Shaw's judgment in the Farwell case was referred to with approval, and was appended as a note to the case. There, a miner while being drawn up a shaft was killed through the negligence of the engineer operating the engine which drew up the cage. However, Lord Cranworth immediately stated:

"With reference to the law of England, I think it has been completely settled that in respect of injuries occasioned to one of several workmen engaged in a common work (and I know of no distinction whether the work be dangerous or not dangerous), the master is not responsible if he has taken proper precautions to have proper machinery and proper servants employed."

The views which he finally expressed were concurred in by the judges who presided in the Maguire case.

Lord Cranworth first considered the case of injuries to strangers and used the following argument:

"When an injury is occasioned to anyone by the negligence of another, if the person injured seeks to charge with its consequences any person other than him who actually caused the damage, it lies on the person injured to show that the circumstances were such as to make some other person responsible. In general, it is sufficient for this purpose to show that the person whose neglect caused the injury was at the time when it was occasioned acting not on his own accouut, but in the course of his employment as a servant in the business of a master, and that the damage resulted from the servant so employed not having conducted his master's business with due care. In

such a case the maxim '*respondeat superior*' prevails, and the master is responsible. Thus, if a servant driving his master's carriage along the highway carelessly runs over a bystander, or if a gamekeeper employed to kill game carelessly fires at a hare so as to shoot a person passing on the ground, or if a workman employed by a builder in building a house negligently throws a stone or brick from a scaffold, and so hurts a passer-by: in all these cases (and instances might be multiplied indefinitely) the person injured has a right to treat the wrongful or careless act as the act of the master. *Qui facit per alium facit per se.* If the master himself had driven his carriage improperly, or fired carelessly, or negligently thrown the stone or brick, he would have been directly responsible, and the law does not permit him to escape liability because the act complained of was not done with his own hand. He is considered as bound to guarantee third persons against all hurt arising from the carelessness of himself, or of those acting under his orders, in the course of his business. Third persons cannot, or, at all events, may not, know whether the particular injury complained of was the act of the master or the act of his servant. A person sustaining injury in any of the modes I have suggested has a right to say: 'I was no party to your carriage being driven along the road, to your shooting near the public highway, or to your being engaged in building a house. If you choose to do, or cause to be done, any of these acts, it is to you, and not to your servants, I must look for redress, if mischief happens to me as their consequence.' A large portion of the ordinary acts of life are attended with some risk to third persons, and no one has a right to involve others in risks without their consent. This consideration is alone sufficient to justify the wisdom of the rule which makes the person by whom, or by whose orders, these risks are incurred responsible to third persons for any ill consequences resulting from want of due skill or caution."

Having made this practical exposition, he continued, on page 284:

"But do the same principles apply to the case of a

workman injured by the want of care of a fellow-workman engaged together in the same work? I think not. When the workman contracts to do work of any particular sort, he knows, or ought to know, to what risks he is exposing himself; *he knows*, if such be the nature of the risk, *that want of care on the part of a fellow-workman may be injurious or fatal to him, and that against such want of care his employer cannot by possibility protect him.* If such want of care should occur, and evil is the result, he cannot say that he does not know whether the master or the servant was to blame. He knows that the blame was wholly that of the servant. He cannot say the master need not have engaged in the work at all, for he was party to its being undertaken."

This, it will be seen, is an elaboration of Chief Justice Shaw's views. As one man has no control over another so as to prevent him from being negligent at some time or another, it is therefore not reasonable for a servant to assume that the master guarantees that another servant will not be negligent. The servant, therefore, understands that as he has no such guarantee, and is paid to do the work, he necessarily is to take or assume the risk (as between himself and his employer) of being injured by some other servant who is also performing or carrying on the work of the master. He, of course, has the right to assume that the master will in the first instance (that being presumably the master's act) employ competent fellow workmen, for it would be wrong for the master, without the servant's knowledge, to surround him with other workmen whom the master knew to be incompetent. So, as the servant understands that the master cannot and does not guarantee that another servant may not at some time be negligent in the performance of his work, which may injure him, and that the master does not therefore undertake to indemnify him against such injury or such

risk, it is clear that it can make no difference in what grade of service, whether superior or not, the servant doing the injury may be, nor indeed what act he may be doing, if it is one which the other servant understands is necessary for the operation of the work of the master in which he also is engaged.

This was demonstrated in the often cited case of *Wilson* v. *Merry and Cunningham*, L. R. 1 Scotch App., 327, decided in 1868 in the House of Lords, before Lord Chancellor Cairns, Lords Colonsay, Cranworth and Chelmsford. There it appeared that respondents operated a coal pit sunk to a depth of ninety fathoms, containing four seams of coal. In order to open and work one of the seams from the side of the pit, a scaffold was erected in the pit from which to drive the level in the same. The scaffold was completed Saturday, November 21st. On the following Monday, the 23d, Robert and Henry Wilson, sons of appellant, were engaged to assist in driving the level, and on the 24th went to work. The system of ventilation in the pit before the scaffold was placed there was of the usual kind by downcast and upcast, and it was not suggested that before the platform was erected the system of ventilation was deficient in any particular. The platform interrupted the free current or circulation of air in the pit, and although apertures were left in the platform on the upcast side for the return of the air from the shaft below, yet an accumulation of fire-damp appears to have taken place underneath the platform, and on November 25th, while Henry Wilson was searching on the scaffold with a light for a wedge which was missing, the light came in contact with fire-damp coming from beneath the scaffold, and an explosion took place by which the scaf-

fold was blown up and Henry Wilson killed. No personal fault or negligence was imputed to the respondents. The general manager of their works in Lanarkshire was Mr. Jack. The manager of the coal pit, underneath Jack, was John Neish. Subordinate to Neish was a man named Bryce, who attended to the underground operations. One Robson, formerly a mining engineer, was a partner with respondents, and it was under the general direction of respondents and Robson and Jack that the working of the particular seam was commenced. The charge of sinking the pit and making arrangements for working it was given to Neish. It was proved that Jack and Neish were competent, and they were furnished by respondents with all necessary materials and resources for working in the best manner. A verdict for appellant, £100 damages, was reversed, it being held that Neish and Bryce, in erecting the platform, were to be regarded as fellow-servants with the deceased, and for their neglect, if any, in so obstructing the ventilation the respondents could not be held liable.

In his opinion the Lord Chancellor quotes with approval the language of Lord Cranworth in the Reid case, heretofore set out. On page 332 he says:

"The master is not, and cannot be, liable to the servant unless there be negligence on the part of the master in that in which he, the master, has contracted or undertaken with his servant to do. The master has not contracted or undertaken to execute in person the work connected with his business. The result of an obligation on the master personally to execute the work connected with his business, in place of being beneficial, might be disastrous to his servants, for the master might be incompetent personally to perform the work. At all events, a servant may choose for himself between serving a master who does and a master who does not attend in person to his business. *But what the master is, in my opinion,*

bound to his servant to do, in the event of his not personally superintending and directing the work, is to select proper and competent persons to do so, and to furnish them with adequate materials and resources for the work. When he has done this he has, in my opinion, done all that he is bound to do. And if the persons so selected are guilty of negligence this is not the negligence of the master; and if an accident occurs to a workman to-day in consequence of the negligence of another workman, skillful and competent, who was formerly, but is no longer, in the employment of the master, the master is, in my opinion, not liable, although the two workmen cannot technically be described as fellow-workmen. As was said in the case of *Tarrant* v. *Webb*, negligence cannot exist if the master does his best to employ competent persons; *he cannot warrant the competency of his servants.*"

On page 333 he continues:

"I think the learned judge ought to have told the jury that if they were of the opinion that the respondents exercised due care in selecting proper and competent persons for the work and furnished them with suitable means and resources to accomplish the work the respondents were not liable to the appellant for the consequences of the accident."

The opinion of Lord Cranworth is also worthy of perusal: Of the respondents, the operators of the mine, he says:

"They discharged their duty when they procured the services of a competent underground manager; and whether Wilson began to work with or under Neish before or after he had prepared the scaffold was a matter of no importance. * * * I have no difficulty in saying that he (the judge) ought to have charged the jury to the effect that Neish and the deceased were, according to the evidence, fellow-workmen, and that the defenders were not liable if they (the jury) were of opinion that Neish was a properly skilled workman to act as underground manager, even if there were defects in the scaffolding which caused the accident."

Lord Chelmsford said, on page 336:

"In the course of working the Haughhead pit it became necessary to arrange a system of what, for distinction's sake, I may call local ventilation. This must be considered as part of the mining operations, and therefore, even if the accident happened in consequence of the scaffold in the Pyotshaw seam having, under Neish's orders, been constructed so as to obstruct the necessary ventilation, it would have been the result of negligence in the course of working the mine; and if Neish and the deceased were fellow workmen, it would have been one of the risks incident to the employment in which the deceased was engaged. * * *

If the platform in the Pyotshaw seam was originally of improper construction for the purpose of ventilation, there was undoubtedly a complete act of negligence on the part of Neish at the moment of its erection. But as he was bound to take care that sufficient ventilation was maintained during the whole time of the workings, as long as he omitted to do so he was guilty of negligence, which continued down to the time of the occurrence of the accident."

Lord Colonsay, among other things, said:

"On the other hand, there are risks incident to occupations more or less hazardous, and of which the laborer who engages in any such occupation takes his chance. It is eminently so in regard to mining operations. There are perils of the pit as well as of the other deep, and one of those perils is the risk of the consequences that may, even in the best regulated pits, result from the carelessness or recklessness of one or more of those persons composing the organized body engaged in working the mine. The master does not impliedly insure the workman against such perils."

The foregoing reasoning is sometimes lost sight of, even by some of the English judges, and the maxim, "*Volenti non fit injuria*," is applied, as in *Thomas* v. *Quartermaine*, L. R., 18 Q. B., 685, wherein Bowen and Frey, L. J. J., held that under the employers' liability

act this maxim had not been affected and was still applicable to show that the servant assumed the risk of dangers apparent from the use of appliances claimed to be defective and the manner in which the business was conducted; and that in such case there was no evidence of negligence arising from breach of duty on the part of the defendant towards the plaintiff because of a knowledge of the danger.

The maxim was also applied by Lord Bramwell in *Membery* v. *Great Western Ry. Co.*, L. R., 14 App. Cas., 179.

While no doubt that maxim may be applied as far as it goes, as it is of general application, yet it is manifest it does not go far enough in this class of cases. It would be pertinent where the relation of master and servant did not exist, as in the case of *Woodley* v. *Metropolitan District Ry. Co.*, L. R., 2 Exch. Div., 384, where the servant of a contractor who had undertaken to do some work in a tunnel was injured by a train, he claiming that there was negligence on the part of the railway company in failing to use proper precautions and signals to notify him; but it was held that as he had worked there for some little time and had become acquainted with the manner in which the trains were operated, he voluntarily assumed the risks of the danger.

The principle to be deduced is that the servant may only assume that the master will use reasonable care and caution in the selection of other competent and fit workmen, and that he will furnish reasonably suitable materials and resources to those workmen to enable them to accomplish the work in a reasonably safe way. Therefore, the servant himself assumes all risks of injury caused by the negligence of fellow servants.

This court has, therefore, except in the *Ross* case, since overruled, logically followed the conclusion that difference in the grade of service makes no difference as to the non-liability of the master; as in *Alaska Mining Co.* v. *Whelan*, 168 U. S. 86, the foreman of a mine was held to be the fellow servant of a miner; and in other cases foremen and bosses of gangs of men have been held to be fellow servants of the men under them, the authorities being referred to and reviewed in the recent case of *New England Railroad Company* v. *Conroy*, decided December 4, 1899, by this court, 20 Sup. Ct. Rep., 85.

See, also,

Grady v. *Southern Ry. Co.*, 34 C. C. A., 494.

In *Hall* v. *Johnson*, 3 H. & C., 589, an "underlooker" appointed under a statute, and whose duty it was to superintend the mining operations, was held to be a fellow servant of a miner injured through his negligence.

The master of a ship and a seaman:

Olson v. *Oregon C. & N. Co.*, 96 Fed., 109.

See

What Cheer Coal Co. v. *Johnson*, 56 Fed., 810.

So Donahue was not the mine superintendent, and if he was doing what is presumed by plaintiff, he was simply performing the work of a fellow servant.

The true test is to determine the character of the act which was being performed. If the servant causing the injury, no matter how high his grade or position, was negligently performing an act which was necessary to

carry on the work in which they were all engaged, he would simply be performing the work of a fellow servant.

Thus, the New York cases say that where the one servant is performing a matter of detail necessary in carrying on the business, he is performing simply the act of a fellow servant, and must be regarded as such.

Golden v. *Seighardt*, 53 N. Y. Suppl., 460.
Loughlin v. *State*, 105 N. Y., 159.

Out of the foregoing rule have arisen those cases holding in general terms that it is the duty of a master to use reasonable care in respect to the reasonable safety of the place which he *furnishes* for the servant in which to perform his work, but, as will be shown, this can only have application to those cases where the servant understands that the place is one already *furnished as a permanent place for work*, and is not one which is to be furnished or made safe by some other workman co-operating to accomplish the ultimate work or design of the master. Where the servant is set to work in a factory he may assume that his employer has furnished that factory, and, therefore, his working place, and that his employer (as the act of furnishing the working place is assumed to be his act) has seen to it that it is reasonably safe for the purposes. But the servant cannot indulge in any such assumption where, from the very nature of his surroundings and the character of his work, he knows that the condition of his working place is changing from time to time, not only by his own work, but by the work of other servants. In such case he, therefore, necessarily understands that his safety is, in a measure, dependent upon the degree of care used by his fellow workmen. It is, therefore, well settled, for, indeed, it was the basis

of the opinion in the Wilson case, *supra*, that, especially in the case of mining, where the conditions of the working places are changing, the rule in respect to a safe place has no application, and the master discharges his duty where he furnishes the necessary appliances and instrumentalities to render it reasonably safe, and uses reasonable care to provide competent workmen to assist.

This is the basis of the decision of this court in *Armour* v. *Hahn*, 111 U. S., 313, where a workman engaged in the erection of a building was injured by reason of the defective construction of a scaffold. It was held the master was not liable. The question of liability for the negligence of a foreman was not in that case, but has since been decided in favor of the master by this court in other cases.

In *Quebec Steamship Company* v. *Merchant*, 133 U. S., 375, it appeared that the stewardess of a steam vessel coming on deck to throw the contents of a pail over the side of the vessel at a gangway, leaned over the railing, composed of four horizontal rods, which gave way because not properly secured. She fell into the water and was injured. The rods were movable, to make a gangway, and had been recently opened to take off some baggage of passengers, and not properly replaced. The porter and the carpenter had attempted to replace them, but left the work, knowing that it was unfinished. The ship's crew were divided into three departments—the deck department, containing the first and second officers, the purser, the carpenter and the sailors; the engineer's department, containing the engineers, the firemen and the coal-passers; and the steward's department, containing the steward, the waiters, the cooks, the porter and the stewardess. It was held that

the porter and the carpenter were fellow-servants with the plaintiff, and the corporation was not liable. Here, on account of the negligence of the carpenter, the place was rendered unsafe to the stewardess.

So, in *Hudley* v. *Pinkney & Sons Steamship Co.*, L. R., 1 Q. B. Div., 58, it was decided in the Court of Appeals that the captain and crew employed in the navigation of a ship by the owner are fellow-servants engaged in a common employment. The injury in that case was the result of the negligence of the captain in failing to have adjusted a movable railing before a storm, the railing having been supplied by the ship owners and in proper condition.

In *Russell Creek Coal Co.* v. *Wells*, 96 Va., 416; s. c., 31 S. E., 614, it was held that where the condition of the place where the miner was working was constantly changing, and the duty of keeping it in safe condition in the prosecution of the work devolved on the miner and mine boss, the mine boss was a fellow-servant of the men.

To the same effect, see

Hughes v. *Oregon Improvement Company*, 20 Wash., 294; s. c., 55 Pac., 119.

The same rule was applied with reference to coal mining by the Supreme Court of Ohio in *Consolidated Coal and Mining Company* v. *Clay's Adm'r.*, 51 Oh. St., 542; s. c., 38 N. E., 610, 613, although we know that the Ohio courts have made a distinction as to grade of service. In the opinion it is said:

"Here the place was not furnished as, in any sense, a permanent place of work, but was a place in which surrounding conditions were constantly changing, and, instead of being a place furnished by the master for the employes, within the spirit of the decisions referred to, was a place the furnishing and preparation of which was

itself part of the work which they were employed to perform. The distinction is shown in a number of cases, among which may be cited *Frazer* v. *Lumber Co.*, 45 Minn., 235, 47 N. W., 785; *McGinty* v. *Reservoir Co.*, 155 Mass., 183, 29 N. E., 510, and *Coal Co* v. *Schaller*, 42 Ill. App., 619. See, also, *Hall* v. *Johnson*, 3 Hurl & C., 589; *Waddell* v. *Simoson*, 112 Pa. St., 567, 4 Atl., 725."

See, also,

Finalyson v. *Utica Mining Co.*, 67 Fed., 507 (C. C. A., 8th Circuit).

Cincinatti, N. O. & T. P. Ry. Co. v. *Mealer*, 50 Fed., 725 (C. C. A., 6th Circuit).

Ling v. *St. P., M. & N. R. Co.*, 50 Minn., 160; s. c., 52 N. W., 378.

In the last case cited the Supreme Court of Minnesota held a master not responsible to a servant for the act of a foreman in negligently selecting a defective instrument —an iron hook—to which to attach a pulley to lift a heavy weight in a boiler shop.

See, also,

Ross v. *Walker*, 139 Pa. St., 42; s. c., 21 Atl., 157.

In *Ell* v. *N. P. R. Co.*, 1 North Dakota, 336; s. c., 48 N. W., 222, there is a well-considered opinion on the above proposition.

Miller v. *N. Y., N. H. & H. R. R. Co.*, 26 N. E., 282, is the latest ruling of the Massacusetts Court.

In *Frazer* v. *Red River Lumber Company*, 45 Minn., 235; s. c., 47 N. W., 785, it appeared that there was a crew of men engaged in a yard to pile lumber. The plaintiff was engaged in assorting and scaling. In making one

of the piles, the pilers negligently projected as a step an unsound and unsafe board, and plaintiff, while ascending the pile in the line of his duty, stepped upon it, causing it to break, whereby he was injured. Held, that he could not recover. Judge MITCHELL says:

"We shall not attempt to do what no court has yet been able to do, viz: to formulate a statement of the rule that will furnish a test by which to determine every case; but *we may suggest that, in our opinion, an important consideration, often overlooked, is whether the structure, appliance, or instrumentality is one which has been furnished for the work in which the servants are to be engaged, or whether the furnishing and preparation of it is itself part of the work which they are employed to perform.*"

The rule was applied in *Lindval* v. *Woods*, 41 Minn., 212; s. c., 42 N. W., 1020, where railroad graders were cutting down one place and filling another, and were using material furnished by the master to extend the bridge work as the grading progressed, and the bridge work fell because defectively constructed and injured the plaintiff; held that he was a fellow-servant of the foreman and others who had failed to use properly the material furnished by the master for the construction of the bridge work.

See

Eichler v. *St Paul*, 40 Minn., 262; s. c., 41 N. W., 575.

In *McGinty* v. *Athol Reservoir Co.*, 155 Mass., 183; s. c., 29 N. E., 510, a servant was injured by the falling of a derrick. The derrick was changed from place to place as occasion required, and the moving and adjusting it was the duty of the workmen. It was held that if there was any negligence in the manner in which the post

was sunk it was the negligence of a fellow workman; that the superintendent in this respect was only a fellow servant as between himself and the plaintiff, and defendant would not be liable for his negligence.

The English cases are clear.

Hutchinson v. *Y. N. & B. Ry. Co.*, 5 Exch., 533.

Lovegrove v. *L. B. & S. C. Ry. Co.*, 16 C. B. (N. S.), 669.

Tarrant v. *Webb*, 18 C. B., 797.

Ormond v. *Holland*, Ell. B. & E., 102.

Morgan v. *Railroad Company*, L. R., 1 Q. B., 149.

The fire bosses were also fellow servants of the deceased under the circumstances of this case.

Hughes v. *Oregon Improvement Co.*, 20 Wash., 294; s. c., 55 Pac., 119.

This was held, also, in *Lehigh Valley Co.* v. *Jones*, 86 Pa. St., 438. It will be found that the system of ventilation commented on in that case was similar to the one in the case at bar, with the exception that in that case a shaft was sunk to the coal vein, whereas in the case at bar the air was forced down the main slope, which was driven down along the vein.

Red-stone Coke Co. v. *Robey*, 115 Pa. St., 364; s. c., 8 Atl., 593.

Waddell v. *Simoson*, 112 Pa. St., 567; s. c., 4 Atl., 725.

Lincoski v. *Coal Co.*, 157 Pa. St., 153; s. c., 27 Atl., 577.

So, too, as a siphon was furnished and put in operation, it is manifest that the one whose duty it was to see to the opening or closing of the siphon, or that it was kept running, was also a fellow servant in this respect.

Jones v. *Granite Mills*, 126 Mass., 88, and authorities heretofore cited.

But there was no evidence that the siphon was not kept running when necessary to keep down the water in the fourth left air course to a sufficient extent. The burden was certainly on the plaintiff, in any event, to show that such was not the fact, and that there was negligence in this respect.

The company had done all that could have been expected of it. It had made the necessary rules and prescribed the necessary precautions, furnished the necessary appliances, employed men who understood the business for which they were employed, and who, when employed, appeared to be competent. It had employed men to examine for gas and remove the same; also to see that the ventilation was good and to render the work as safe as possible. What more could it do? Should it hire other men to see that those employed discharged their duties, and even had it done this, what assurance would there be that there might not at some time be negligence in some man performing his duty? Must others be employed to watch them, and so on? If so, there never would be an end to the employment of men. Plaintiff's intestates had no more reason to assume that they would be indemnified against the risk of being injured through the negligence of other workmen than they could assume that because they were

paid to do their work carefully the employer undertook to indemnify other workmen against their possible neglect.

THIRD. ASSUMING THAT SOMEONE HAD GONE INTO ROOM 8 WITH A NAKED LIGHT OVER THE DANGER SIGNALS, AND THAT GAS HAD BEEN IGNITED THERE, CAUSING THE EXPLOSION, YET AS THE COMPANY HAD FURNISHED SAFETY LAMPS AND THE PROTECTION BY THE USE OF FIRE SIGNALS WAS ADEQUATE TO PREVENT ANY DANGER ON ACCOUNT OF GAS, IF OBSERVED BY THE MEN AS REQUIRED, THE COMPANY HAD USED REASONABLE CARE AND DISCHARGED ITS DUTY. THE MASTER DOES NOT INSURE THE SAFETY OF HIS SERVANTS.

It is undisputed, under the evidence, that gas is not explosive unless it comes in contact with a naked light and there is a proper admixture of air; also that workmen could go into a room with gas without the danger of explosion by using safety lamps, and that safety lamps were furnished; also, that the fire-mark or signal was so plain and being placed along the track would be so conspicuous that no one could go over the same without seeing it. This visible fire-mark or danger signal was placed a few feet above the last cross-cut in room 8, and another one a little below, so that if we indulge in plaintiff's theory no one could go up to standing gas, if any, in room 8 without passing over these danger signals. This was a precaution well known in that mine, and was the one in general use. The mine operator had no more reason to expect that such a signal would be disregarded by any of the men than the deceased themselves. If we were to assume, therefore, that it was the duty of the company to

use precautions to prevent gas explosions, this duty was fulfilled by the use of such precautions, as well as by the well-known order or well-understood custom that no one was allowed to go over such fire-mark without using a safety lamp.

Moreover, room 8 was at the time finished. Miners were not expected to work there; it was not a "working place," and it would be unusual to expect that anyone would go into this room. There remained nothing to be done in that room except at some time or other to remove the track therein which was no longer being used. It would necessarily be expected that anybody going in for that purpose would heed the precaution and use a safety lamp. The undertaking of the master is not that of insuring the safety of his workmen, even as against appliances which it is the master's duty to furnish. In respect to such things, it is well settled that the master is only expected to use reasonable care to furnish appliances reasonably safe—not absolutely safe.

A. T. & S. F. R. Co. v. *Wagner*, 33, Kan., 660.

It did not appear that any other precautions could have been taken or were in use in coal mining than those adopted. Indeed, from the evidence, such precaution seems to have been the usual one in the business. Such fire signal was indicated as a "dead line," was well known to miners, and as one over which no man should pass using a naked light. In the operation of a coal mine the business itself is necessarily of a most hazardous and dangerous character, particularly in mines where gas is generated. In the operating of this class of mines, absolute safety is unattainable, and the defendant was not an insurer of plaintiff's intes-

tates. It was liable for consequences, not of danger, but of its negligence, if any.

In the case of *Bertha Zinc Co.* v. *Martin's Adm'r*, 93 Va., 791; s. c., 22 S. E., 873, it was held that ordinary care depends upon the circumstances of the particular case, and is such care as a person of ordinary prudence, under all the circumstances, would have exercised, and must be ascertained by the general usages of the business. In the opinion it is said:

"All the cases agree that the master is not bound to use the newest and best appliances. He performs his duty when he furnishes those of ordinary character and reasonable safety, and the former is the test of the latter; for, in regard to the style of the implement or nature of the mode of performance of any work, 'reasonably safe' means safe according to the usages, habits, and ordinary risks of the business. Absolute safety is unattainable, and employers are not insurers. They are liable for the consequences, not of danger, but of negligence; and the unbending test of negligence in methods, machinery and appliances is the ordinary usage of the business. No man is held by law to a higher degree of skill than the fair average of his profession or trade, and the standard of due care is the conduct of the average prudent man."

In *Berns* v. *Coal Company*, 27 W. Va., 285, the following language is used:

"The owner of a coal mine is not required to resort to the most expensive methods for keeping the mine free from fire damp, in order to escape responsibility for injury to his servants working in the mines caused by an explosion of the fire-damp. If he has reasonably safe methods in use for the proper ventilation of the mine and uses reasonable care to keep the mine properly ventilated and fire-damp expelled therefrom, he will not be responsible. He is not held to extraordinary care.

"Any different rule from this last one would be disastrous to mining interests. If every proprietor of coal mines should be held responsible for all the injuries to

his servants caused by the explosion of the fire-damp, unless he procured all the new and expensive machinery which might be invented to prevent such explosions, the result might be that a monopoly in mining would be created because none but heavy capitalists would be able to procure the new machinery."

See

Miss. River Logging Co. v. *Schneider*, 20 C. C. A., 390, 394 and 395.

Hunt v. *Kile*, 98 Fed. Rep., 52. (C. C. A., 7th Cir.)

FOURTH. AS IT WAS WELL KNOWN TO THE DECEASED THAT THE ONLY METHOD USED OF INDICATING THE PRESENCE OF GAS IN SUCH PLACES WAS BY THE FIRE SIGNALS, AND THAT THE ORDERS AND WELL-KNOWN CUSTOM IN THE MINE WERE THAT NO ONE SHOULD GO OVER SUCH SIGNALS WITH A NAKED LIGHT, THEN IF PLAINTIFF'S THEORY WERE ESTABLISHED, THAT THE EXPLOSION WAS CAUSED BY SOME OF THE WORKMEN DISREGARDING THE SIGNAL AND GOING OVER THE SAME WITH A NAKED LIGHT, STILL THE DECEASED, KNOWING THE MANNER IN WHICH THE MINE WAS BEING OPERATED IN THIS RESPECT, ASSUMED THE RISKS AND DANGERS ARISING FROM THE POSSIBILITY OF THE NEGLIGENCE OR DISOBEDIENCE OF OTHER WORKMEN. IN SUCH CASE THERE WOULD BE NO CULPABLE NEGLIGENCE ON THE PART OF THE MASTER, THE NEGLIGENCE, IF ANY, BEING WAIVED BY THE SERVANT; SO THAT THE ONLY NEGLIGENCE, IF ANY, WOULD BE THAT OF A FELLOW-WORKMAN IN DISREGARDING THE PRECAUTIONS.

For the sake of argument it may be admitted generally that ordinarily it is the duty of the master to use reasonable care to furnish a reasonably safe place for his servant; but this is only assumed from the nature of the agree-

ment, and can only be assumed when it is shown that the servant has any reason so to presume. From the preceding argument, it is manifest that one who undertakes to carry on a business, as to those who engage to co-operate with him and assist in carrying it on, has the right to conduct it in such way as to him may seem best, and although his method be not the best, he does no wrong to one who knows how it is being conducted and voluntarily enters into his employment or continues therein after knowledge of the means adopted. In such a case, the servant cannot close his eyes to the manner in which the business is being conducted, and if injured then say it might have been conducted in some other or better manner. As to such a person the master cannot be deemed to have been negligent in the manner of conducting his business. Such person cannot be heard afterwards to complain of that manner. It is immaterial then whether gas would be permitted to accumulate, with only such precaution to designate its presence, twenty-four, forty-eight or fifty-six hours. The risk of danger of some one disregarding the signal was just the same.

In *Wormell* v. *Maine Central R. Co.*, 79 Me., 397; s. c., 10 Atl., 51, it was said:

"Every employer has the right to judge for himself in what manner he will carry on his business, as between himself and those whom he employs, and the servant having knowledge of the circumstances must judge for himself whether he will enter his service, or, having entered, whether he will remain. *Hayden* v. *Smithville Mfg. Co.* 29 Conn., 548; *Buzzell* v. *Laconia Manuf g. Co.*, 48 Me., 121; *Shanny* v. *Androscoggin Mills*, 66 Me., 427; *Coombs* v. *New Bedford Cordage Co.*, 102 Mass., 585; *Ladd* v. *New Bedford R. Co.*, 119 Mass., 413."

It is further stated:

"But there are corresponding duties on the part of the

servant; and it is held that the master is not liable to a servant who is capable of contracting for himself and knows the danger attending the business in the manner in which it is conducted, for an injury resulting therefrom. *Lovejoy* v. *Boston & L. R. R.*, 125 Mass., 82; *Ladd* v. *New Bedford R. Co.*, *supra*; *Priestly* v. *Fowler*, *supra*."

This rule was applied in the recent case of *Hunt* v. *Kile*, 98 Fed. Rep., 49, 53. (C. C. A., 7th Circuit.)

See, also,

Wilson v. *Winona & St. P. R. Co.*, 37 Minn., 326; s. c., 33 N. W., 909.

Smith v. *Winona & St. P. R. Co.*, 41 A. & E. R. Cas., 289.

Hawk v. *Pennsylvania R. Co.*, 11 Atl., 459.

Rush, Adm'x. v. *Mo. Pac. Ry. Co.*, 36 Kas., 129.

The discussion of Mr. Justice Valentine in the last case cited is worthy of perusal.

The rule was virtually applied in *Southern Pac. Co.* v. *Seley*, 152 U. S., 145, and in *Randall* v. *Railroad Company*, 109 U. S., 478, as well as in *Seymour* v. *Maddox*, 16 Q. B. (A. & E., N. S.), 326: *Goodridge* v. *Washington Mills*, 160 Mass., 234.

The rule was recognized in the elaborate opinion of the Supreme Court of New Mexico when this case was before it in review of the first trial.

Cerillos Coal Railroad Co. v. *Deserant, Adm'x.*, 49 Pac., 807.

See, also,

Linton Coal & Mining Co. v. *Persons* (Sup. Court Indiana), 43 N. E., 651.

A vast number of authorities might be cited on the same proposition.

Now, it is clear from this principle that under such assumption of risk it cannot be contended that there was any actionable negligence of the master in the means adopted or by reason of any failure to carry on the business in some other way; for, as said in Bailey on Masters' Liability for Injuries to Servants, page 198:

"A risk assumed is one which was or becomes embraced in the contract. It cannot be made to depend upon the conduct of the servant, for it has been assumed."

It was clearly pointed out in *Perigo* v. *Chicago, R. I & P. R. Co.*, 52 Ia., 11, in the following language:

"It is now the established doctrine of this court, in harmony with the current of authority elsewhere, that an employe who knows, or by the exercise of ordinary diligence could know, of any defects or imperfections in the things about which he is employed, and continues in the service without objection, and without promise of change, is presumed to have assumed all the consequences resulting from such defects, and to have waived all right to recover for injuries caused thereby. (*Muldowny* v. *Illinois Central Ry. Co.*, 39 Iowa, 615; *Kroy* v. *C. R. I & P. R. Co.*, 32 Iowa, 359; *Way* v. *The Illinois Central Ry. Co.*, 40 Iowa, 341; *Lumley* v. *Caswell*, 47 Iowa, 159.) * * * The doctrine of these cases is that the negligence of the defendant in furnishing defective or improperly constructed machinery and implements is waived by remaining in the employment without protest or promise of amendment. *The waiver of the negligence of the defendant places the case in the same position as though the defendant had not been negligent, and without the negligence of the defendant there can be no recovery.* This waiver cannot be affected by the particular situation in which the employe may be placed, or the rapidity and promptness with which he may be required to act at the time of the accident."

Approved by the same court in the subsequent decision of *Wells* v. *B. &c. R. Co.*, 52 Iowa, 520.

In *Assop* v. *Yates*, 2 H & N., 768, plaintiff, a laborer, was employed by defendant to do work at the building of a house in a street, and there had been a boarding put up to protect the building from carriages passing. Plaintiff had complained that the boarding was too narrow to permit him to pass with a hod of mortar. While he was working, a vehicle came up the street and struck the boarding, in consequence of which he got injured. In an action against his employer he was non-suited, as, after he had complained, he had continued working there voluntarily, with full knowledge; and the part which the master had in the injury was too remote.

A false sentiment is sometimes indulged in over this rule as though it were contrary to reason or right that the master should be exempted from liability, even though the servant subjected himself to the risk without complaint; but the language of Lord Bramwell may be referred to as disposing of any question of sentimentality. He said on one occasion:

"It is said that to hold the plaintiff is not to recover is to hold that the master may carry on his work in a dangerous way and damage his servant. I do so hold, if the servant is foolish enough to agree to it. This sounds very cruel, but do not people go to see dangerous sports? Acrobats daily incur fearful dangers, lion tamers and the like. Let us hold to the law. *If we want to be charitable, gratify ourselves out of our own pockets.*"

By way of further illustration, it may be added: Does not the soldier incur all the risks of warfare, whether known to him or not, and solely for fame or a small reward?

Personal knowledge of the means adopted by the company was brought home to plaintiff's intestates, as shown by the evidence. They knew that gas might accumulate

in any part of the mine, and that the danger signal was the only means adopted to indicate its presence. They also certainly knew as well as their employer that it was possible some fellow-workman might be negligent or careless enough to disregard or not heed the signal. They, therefore, knew the possible danger and risk therefrom. If plaintiff's theory, then, were correct, the proximate cause of the accident was at most the negligence of fellow servants who disregarded the signals or or precautions.

The well-considered case of *Berns* v *Coal Company*, 27 W. Va., 225, goes farther. It was held that if the proprietors of a coal mine have been negligent in permitting fire-damp to accumulate in their mine, which will not produce any injury until ignited, and if it be ignited by a fellow servant who goes into the dangerous part of the open mine with a lighted lamp instead of a safety lamp, contrary to the orders of the proprietors of the mine, and by such a lighted lamp the fire-damp is ignited and exploded, by which a servant is injured, such explosion and injury having been directly and immediately caused by a fellow servant and not by the negligence of the master, the master under the circumstances cannot be held responsible for such injury. The court, after a very elaborate discussion of all the authorities, declares the law to be as follows:

"In the cases which I have cited from other states, the two causes together, the negligence of the master and the negligence of the fellow servant caused the injury to the servant. If, therefore, it appears that the proprietors of a coal mine had been negligent in permitting fire-damp to accumulate in their mine, which would not produce any injury until ignited, and if it were ignited by a fellow servant, who went into the dangerous part of the mine with a lighted lamp, contrary to the orders of the proprietor of the mine, and by such a lighted lamp the fire-

damp was ignited and exploded, by which a servant was injured, such explosion and injury would be directly and immediately caused by the act of the fellow servant and not by the negligence of the master, and the master under these circumstances would not be responsible for such injury. We do not say that these were the facts. It may be that those who went into the mine did not take lighted lamps, and the gas was ignited in some other way. It may be that the mine 'boss' had not done his duty in exploring the mine with the safety lamp to discover the presence of gas; and it may be that no order had been given not to enter that part of the mine without taking the safety lamp; all these are questions for the jury as to the manner in which the explosion occurred."

In *Kivem* v. *Providence, G. & S. Min. Co.*, 70 Cal., 392; s. c., 11 Pac., 741, an action was brought against a mining company for personal injuries suffered by an employe, where the testimony disclosed that a partition between the stairway and car-track in the shaft of a mine which plaintiff was ascending was defective, so that a timber thrown down the car-track went into the stairway and injured him, but that the promoting cause of the injury was the negligence of a co-employe in throwing the timber down the shaft. The court said:

"All the testimony showed that the immediate and proximate cause of the injury sustained by plaintiff was the negligence of his co-employe. * * *

"'The proximate cause of the injury is the object of inquiry, and when discovered must be regarded and relied on.' * * * Even where machinery is defective, so that otherwise a recovery might be had for an injury received, yet, if the promoting cause of the injury is the negligence of a fellow servant, no recovery can be had. Wood, M. & S., 812. The same rule must apply where the appliances for doing work are defective. Even if we could assume, therefore, that the partition between the two compartments of the shaft was not as complete as it should have been, or that the plaintiff would not have been injured if a continuous bulwark had been erected

between the two compartments, or if the posts had been nearer together, still, as the case clearly shows that the plaintiff would not have been injured except for the gross negligence of the co-employe, and that such negligence was the immediate and proximate cause of the injury, and if the appliances furnished by the defendant had been used with ordinary care the injury would not have occurred, the non-suit was proper."

In *Allen* v. *Gas Company*, L. R., 1 Exch. Div., 251, it appeared that defendants had on their premises gates which were safe when open and wedged up, but liable to fall when closed. The attention of the manager had been directed to the unsafe condition of the gates, and orders had been given, but not carried out, to remedy this. The plaintiff, a workman in the employ of the defendants, passed through the gates when open, but on his return one of them was closed, and shortly afterwards, while he was working near the gates, they fell and injured him. It was held that defendants were not liable, as the plaintiff had not shown that the persons employed by defendants were incompetent, and the negligence, if any, which caused the accident was that of a fellow workman of the plaintiff.

This case is not, therefore, analogous to one in which the negligence of the master concurred with that of a fellow workman in causing the injury, for in this case the servant cannot charge the master with culpable negligence, as he was aware of the means adopted and made no objection. The case is entirely different from that of *Grand Trunk Ry. Co.* v. *Cummins*, 106 U. S., 700, in which there was nothing involved but the correctness of an instruction, to the effect, that if the co-servant was negligent, and if the company was also wanting in ordinary care and prudence in discharging its duties, and

such want of ordinary care contributed to produce the injury, *and the plaintiff did not know of such want of ordinary care and prudence*, the defendant would be liable; that if two of these causes contributed the company would be liable; and that the mere negligence of the co servant of itself does not exonerate it (the company) if one of their own faults contributes. As stated in the opinion, this instruction was in effect that if the negligence of the company contributed to—that is to say, had a share in—producing the injury, the company was liable. *But it was a case in which the plaintiff did not know of the negligence or want of care in the defendant.*

In the instructions of the court, the attention of the jury was directed to the provisions of an Act of Congress approved March 3, 1891, 26 U. S. Stats. at Large, page 1104; but no point was made upon this statute in plaintiff in error's brief in the Territorial Supreme Court. For the first time is the statute seriously urged in this court. Neither is any count in the declaration in terms based upon such statute, it being nowhere alleged that the acts or neglect complained of were "contrary to the form of the statute in such case made and provided," nor was any particular proof offered that the mine was of a depth of one hundred feet or more. The act in question provides for the appointment by the government of a mine inspector in each of the organized and unorganized territories; also his eligibility; and prescribes his duties in regard to examining mines and making report concerning ventilation, etc. All this was done; and the official mine inspector examined this mine monthly and approved of the methods used, and found that the ventilation at the times of his examinations was more adequate than as prescribed in this act.

Section 4 of the act provides that if such mine inspector should report any coal mine not properly constructed, or not furnished with reasonable and proper machinery and appliances for the safety of miners and other employes, it should be the duty of the Governor of the Territory, or of the Secretary of the Interior, to *give notice* to the owners or managers of such coal mine that such mine is unsafe, *notifying* them in what particular the same is unsafe, and *requiring them to furnish or provide such additional machinery*, slopes, entries, means of escape, *ventilation or other appliances necessary within a period to be in said notice named;* and if the same be not furnished as required by said notice, it shall be unlawful after the time fixed in such notice for said owners or managers to operate said mine.

Section 6 provides generally that the owners or managers of coal mines of a depth of one hundred feet or more should "provide an adequate amount of ventilation," not less than fifty-five cubic feet per second or thirty-three hundred cubic feet per minute for every fifty men at work in the mine, and in like proportion for a greater number, which air should by proper appliances or machinery be forced through such mine to the "face of each working place," so as to dilute and render harmless and expel therefrom the poisonous gases, etc. To require one to "provide an adequate amount of ventilation" is ambiguous and incorrect. It should read "provide ventilation to an adequate extent" or "provide adequate ventilation"; that is, provide the method and means by which an adequate amount of pure air should be secured, etc. Nature provides the air, and man the appliances for or method or process of replacing foul air by pure in any enclosed place. The latter is ventilation. It is the fanning process.

No particular method or system to be used is pointed out in the act, and evidently it was merely intended to prescribe generally that a system or means of ventilation should be adopted which would furnish at least the amount of air prescribed, and by which this air should be forced to the "working places" where the miners would necessarily be at work. This was done. Sufficient appliances were provided and set in operation.

Section 7 provides:

"That any mine owner or manager who shall continue to operate a mine after failure to comply with the requirements of this act, *and after the expiration of the period named in the notice provided for in section four* of this act, shall be deemed guilty of a misdemeanor, and shall be fined not to exceed five hundred dollars."

Section 16 provides, as a cumulative remedy in case of failure of the owner or manager of the mine to comply with the notice given, that an injunction should be granted on the application of the mine inspector, restraining the further operation of the mine until the requirements are complied with, no bond being required.

There is no attempt in the act to impose a civil liability upon the company as owner or manager, nor does there appear to be any intent to alter the rule of the common law and make the master liable to his servant where he would not be liable in damages at common law for the negligence of one who would be regarded as a fellow-servant at common law.

It is well settled, as stated in Potter's Dwarris on Statutes, 185:

"Further, as a rule of exposition, statutes are to be considered in reference to the principles of the common law, for it is not to be presumed that the legislature in-

tended to make any invasion on the common law further than the case absolutely required. The law rather infers that the act did not intend to make any alteration other than what is specified and besides what has been plainly pronounced."

Sutherland on Statutory Construction, Sec. 401.

In *Detroit* v. *Putnam*, 45 Mich., 263, 265, it was said:

"Where a statute attempts, in derogation of the common law, to create a liability, we cannot go beyond the clearly expressed provisions. Such statutes are not to be extended or enlarged in their scope by construction."

On this subject the following appears in Thompson on Negligence, Sec. 1005:

"The legislature will not be held to intend a repeal of the settled rules of the common law unless the language employed by it clearly imports such an intention."

Section 6 of the foregoing act of Congress appears to have been copied to a large extent from the seventh section of the act of March 3, 1870, of Pennsylvania. (Purd. Dig., 1069, pl. 7.)

Section 7 of the Pennsylvania act provided:

"The owner or agent of every coal mine or colliery shall provide and establish for every such coal mine or colliery an adequate amount of ventilation of not less than fifty-five cubic feet per second of pure air or 3300 feet per minute for every fifty men at work in such mine and as much more as circumstances may require, which shall be circulated through to *the face of each and every working place* throughout the entire mine to dilute and render harmless and expel therefrom the noxious poisonous gases to such an extent that the entire mine shall be in a fit state for men to work therein, and be free from danger to the health and lives of the men by reason of such noxious and poisonous gases, and *all workings shall be kept clear of standing gas;* the ventilation may be produced by using blowing engines, air pumps, forcing or suction

fans, of sufficient capacity and power, or other suitable appliances, as to produce and insure constantly an abundant supply of fresh air throughout the entire mine; but in no case shall a furnace be used in the mine where the coal breaker and chute buildings are built directly over and covering the top of the shaft, for the purpose of producing a hot upcast of air, and there shall be an intake air-way of not less than 20 square feet area and the return air-way shall not be less than 25 square feet."

It will thus be seen that section 6 of the act of Congress is identical in language—almost word for word—with the first part of the foregoing provision of the Pennsylvania statute down to the suggestion in respect to the kind of ventilating appliances. The latter part of the section of the Pennsylvania law, however, points out more specifically the appliances which may be used. In the act of Congress this is left to be specifically designated under section 4 by the public mine inspector and governor of the territory.

Section 8 of the Pennsylvania statute provided for the employment of a mining boss and prescribed his duties, among other things requiring him to examine the workings of all mines generating gas every morning before the miners shall enter, and to ascertain if the mine is free from danger. It is also made his duty to measure the ventilation at least once a week, etc.

In the case of *Lehigh Valley Coal Co.* v. *Jones*, 86 Pa. St., 432, the above act was under consideration. The injury was caused through the alleged negligence of the mining boss in permitting fire-damp to accumulate in a certain part of the mine. It was held that the mining boss was nevertheless a fellow servant of the other workmen, and for his neglect to observe the statutory duties, the master could not be held liable, it appearing in the case that the appli-

ances for ventilation and the system thereof were good, so that the statute was complied with when the proper system of ventilation and appliances were furnished. In the statement of the case it is said :

"The method of ventilation, in general use in the Wyoming coal fields, and, indeed, throughout the entire anthracite region, is by sucking or drawing the air from some distant inlet into the mine, called a 'down cast,' through the mine and thence up and out by what is called the 'up cast,' which is near the shaft. *This system requires that the currents of air shall be carried against the parts of the mine being worked, the 'workings' specified in the ventilation act. This results in separating the worked out part of the mine from the part being operated; the direct currents being thrown against the breasts being worked, and the old or worked chambers and gangways being ventilated by the general suction of air through the whole mine.*"

The place where a miner would be at work, being the "working place," or at the face of the room, was ventilated by a sufficient air current. Room 8, however, was a finished or abandoned room, and no miners would be working there. This room would therefore simply perform the function of affording a channel or passageway through which air might be conducted to other rooms which were being worked in the same or other entryways. There did not exist the same reason for requiring the same particularity of forcing air to the face of an abandoned room as there would be where a room was being worked, or an actual "working." In the case at bar, as in the above case, the system and appliances being furnished, and competent men to operate being employed, the coal company had done all that could be expected of it.

In *Wilson* v. *Merry and Cunningham*, L. R., 1 Scotch App., 327, Lord Chelmsford, on pages 339 and 341,

distinctly held that an Act of Parliament created no civil liability in favor of a servant, which by one section prescribed certain rules to be observed in every coal mine by the owner thereof—among others, that an adequate amount of ventilation was to be constantly produced in all coal mines, etc., to dilute and render harmless noxious gases to such an extent that the working places of the pits, levels and workings should under ordinary circumstances be in a fit state for working therein; and by another section it was provided that if any of the rules were wilfully neglected by the owner or agent of a mine such person should be liable to a penalty of £20. He held the statutory duty was created absolutely for the purposes of the act, but could only be enforced by the penalty, and that it did not alter the rule in regard to fellow servants.

In *Howells and others* v. *Landore Siemens Steel Company*, L. R., 10 Q. B., 62, defendants, owners of a colliery, had appointed, as required by statute, a certificated manager. A miner employed in the colliery was killed by an explosion of fire-damp, death being caused by the negligence of the manager in violating a general provision of the statute, that in certain cases of danger the miners should be withdrawn from the mine. Held, notwithstanding the statute, the manager was a fellow servant of the deceased, and there could be no recovery.

Where the Pennsylvania statute heretofore referred to provided for the employment of a skillful inside overseer or mining boss, upon whom such statute imposed among other things, the duty of seeing that the roofs of mines should be properly secured after a blast and that a right of action should accrue to the party injured through failure to observe the statute, and in case of death to his widow or any of his heirs, it was held that the mining

boss was nevertheless the fellow servant of the miner, and that the miner assumed "the risks that are ordinarily incident" to mining, "among which are those accidents that may result from the negligence of co-employes, of whom, as we have seen, the mining boss is one."

Waddell v. *Simoson*, 112 Pa. St., 567; s. c., 4 Atl., 725.

In *Redstone Coke Co.* v. *Robey*, 115 Pa. St., 364; s. c., 8 Atl., 593, it was held, under the same act as above, that where the mine owners had exercised reasonable care in she selection of a competent mining boss and the mining boss was negligent in not making an investigation for accumulated gas, the company was not liable. The court said:

"His co-employes take the risk of his negligence, precisely as in other cases. If he is incompetent or careless they can at once discover it and notify the superintendent, while the owners, with every wish to protect the miners, have no such opportunities of information. * * * The explosion was caused by the open lamp of the plaintiff coming in contact with the damp black that had accumulated in the mine. It was alleged that no examination of the mine was regularly made with a safety lamp, and that no proper measurement was made of the air course. If we regard these allegations as established by the verdict, it only proves the mining boss to have been negligent, of which fact the miners themselves had ample means of knowledge while the owners had none."

In *Delaware, etc.*, v. *Carroll*, 89 Pa. St., 374, it was held that this act did not change the relation of fellow servants or the common law in that respect.

See, also,

Spiva v. *Osage Coal & Mining Co*, 88 Mo., 73.

In *Atkinson* v. *Newcastle & Gateshead Waterworks Company*, L. R., 2 Exch. Div., 441 (before Lord Chancellor Cairns, Cockburn, C.J., and Brett, L. J.), it appeared that by statute the company were to maintain fire plugs, keep the same at all times charged with water at a certain pressure and allow all persons to use the same to extinguish fire, without compensation, etc. A penalty for failure was imposed. Plaintiff brought an action for damages against the waterworks company for not keeping their pipes charged as required by the act, whereby his premises, situated within the limits of the act, were burned down. Held, that the statute gave no right of action to plaintiff, and that the breach of a public statutory duty which has caused damage does not vest right of action in the person suffering against the person guilty of the breach.

In *Knisley* v. *Pratt et al.*, 148 N. Y., 382; s. c., 42 N. E., 986, it was held that a statute of New York imposing a penalty on the owner of factories in which women were employed for failure to cover cog-wheels, did not prevent a woman from assuming the risks from uncovered cog-wheels; that even such statute was subject to the common law doctrine of the assumption of risks by the servant.

This rule has been applied under a similar statute in *White* v. *Witteman Lithographing Company*, 131 N. Y., 631; s. c., 30 N. E., 236, where a boy under fourteen years of age was injured owing to absence of safeguards required by statute.

To the same effect is *Higgins Carpet Company* v. *O'Keefe*, 25 C. C. A., 220, where a boy fifteen years old, employed in a factory, was injured by unprotected cog-wheels required under the factory act to be covered.

To the same effect is *Graves* v. *Brewer et al.*, 38 N. Y. Suppl., 566; s. c., 4 App. Div., 327.

In *O'Malley* v. *South Boston Gas Light Co.*, 158 Mass., 135; s. c., 32 N E., 1119, it was held that, under a statute imposing a specific liability upon the master in favor of the servant on account of a defect in the works, machinery, etc., the common law rule as to the assumption of risks was still applicable.

It is also well settled that even under a statute which does in terms impose a civil liability upon the master, contrary to the rule of the common law, nevertheless in all other respects the case is governed by the rules of common law applicable, and that the servant still assumes the risks incident to the business in the manner in which it is carried on.

Thomas v. *Quartermaine*, L. R., 18 Q. B., 685.

So in *K. P. Ry. Co.* v. *Peavey*, 34 Kas., 472, 479 and 480, it was held that even under a statute making a railroad company liable to an employe for the negligence of a co-employe, the employe would still be deemed to have assumed the risk of incompetency or negligence of a fellow servant, if he knew of the same and continued thereafter in the employment.

The act, however, is penal (see the seventh section), and must, therefore, be strictly construed. The same construction must be adopted, whether it is sought to enforce a civil or criminal liability, because the same language used cannot be held to mean one thing for one purpose and another thing for another purpose. Section 6 provides no specific method or appliance to be adopted. Section 4, however, does provide how the mine-owner or

manager may be advised as to what appliances or methods to use, or what to do in respect to ventilation and other things. His operation of the mine does not become wrongful or contrary to the statute until, after the time fixed in the notice to him, he fails to adopt the precaution or appliance suggested and continues to operate the mine; and section 7 makes it wrongful to continue to operate only after a failure to comply with the requirements "*and after the expiration of the period named in the notice provided for in section 4*"

The owner is therefore not guilty of any violation of the act until he has been notified that his method is not sufficient and has been advised by the public inspector, as to what means or precautions to take. So, there cannot be held to be any failure to comply with the provisions of this act until a notice has been given him.

This was dictinctly ruled in *Borck* v. *Michigan Bolt and Nut Works*, 111 Mich., 129; s. c., 69 N. W., 254, where a boy twelve and one-half years old, employed in the shops or factory, was injured by falling into uncovered cog-wheels. The statute relative to manufacturing establishments provided in one section: "All gearing and belting shall be provided with suitable safeguards."

In a subsequent section it was provided:

"If * * * belting, shafting, gearing, elevators and machinery * * * are located so as to be dangerous to employes and not sufficiently guarded, * * * after due notice of such defect said proprietors * * * shall be deemed guilty of violating the provisions of this act."

Another section provided a penalty for its violation. Another section also provided for the examination of factories by a public inspector, who should give notice of all defects, etc. It was held that under this statute there

could be no violation thereof and therefore no liability at all events until after the due notice to be given by the inspector had been given.

In the case at bar, the United States mining inspector had examined and approved the system and appliances for and method and means of ventilating this mine. There can, therefore, be no pretense that there had been any violation of the statute.

In any event, to constitute a violation of the statute, there must be shown a willful or intentional failure to observe its requirements. Mere neglect or unintentional failure is not sufficient. Can it be possible that the penalty given in terms does not attach under the act unless there be shown to be a wilful or intentional violation of its provisions and only after notice, yet a civil liability not imposed in terms may follow as matter purely of legal inference or construction from a mere neglect or unintentional failure to come up fully to all the requirements of the statute? Can it be that for the purpose of imposing a penalty the provisions of the statute are not regarded as violated, unless the act be wilful, intentional and done after notice, but for the purpose of imposing by construction alone a civil liability the same provision will be held to be violated by mere unintentional failure? This does not seem reasonable. The same language must have the same meaning. An act cannot be said to be "contrary to the statute" in the one case unless it be also in the other.

The common law rule which requires the master to exercise reasonable care in selecting reasonably competent and efficient co-employes, and in furnishing adequate appliances, is all that can in reason be required of the master. A statute which imposes in terms a liability

upon the master beyond this and for the negligence of other employes has not the slightest tendency to prevent accidents or injuries to the employes themselves. In the annual report of 1899, just issued, of James Roderick, Chief of the State Bureau of Mines and Mining of Pennsylvania, there is a chapter dealing with mine accidents and their causes. He says, among other things:

"Possibly neglect can be traced to some colliery managements, but the greatest neglect is on the part of the employe."

How is it possible that a statute which makes the master the insurer of his servant against the negligence of a fellow workman can have the effect of preventing the fellow servants from being negligent? Can the prescience of man or power of one over the future conduct of another be practically increased by statute? Does such statute render it any more possible for one man to prevent another from being negligent? If it be really the desire of the legislature to protect workmen against injuries and accidents, the only rational way to accomplish such a result is to make the fellow workman, alone, whose negligence has caused the accident, subject to penalties, and empower the master to enforce in an efficient way such penalties. There are some statutes which are to this effect. They are the only ones based upon a rational view of the subject. For this reason, if for no other, the court should not by construction extend the common law liability of the master or alter the common law rule as to fellow servants. A statute which in terms changes this rule has its only basis in a desire to afford pecuniary compensation to a party injured from one who is not himself at fault, merely because the real person committing the wrong may not be able to respond pecuniarily.

IV.

The Assignment of Error Considered.

First: In respect to the evidence.

An examination of the assignments of error in respect to rulings on the evidence will show the objections to be trivial.

The assignments of error are not in accordance with rule 35, as the full substance of the evidence admitted or rejected is not quoted or set out. Merely the questions are set out; but whether the answers were prejudicial or not does not appear.

In the Supreme Court of the Territory there was only a general assignment that the court erred in admitting improper evidence or in refusing to admit proper evidence. For this reason, if no other, the alleged errors should not be considered.

Take the first assignment. The question is:

"Then, if this explosion occurred at 10:45, state whether or not—state what at that particular time the miners in the rooms would be engaged in."

The witness had already testified, without objection, to the question immediately preceding, that he was familiar with the manner in which miners did their work, the times of their firing shots and doing other acts, and that from half past 10 to 11 — sometimes 11:30 — the miners would begin to make their cartridges for the purpose of blasting coal. He was the mine inspector and knew the general course and custom of the work. The answer was:

"Well, they would be loading their coal and after loading their coal, between times they would be preparing

for firing shots, that is, drilling holes, making cartridges, tamping their holes ready to fire at noon."

This appeared from other evidence to be the fact. There was no dispute about it. It was proper, moreover, to prove the custom or usage to make a *prima facie* presumption that the men were doing what they were in the habit of doing.

Knickerbocker Life Insurance Co. v. *Pendleton*, 115 U. S., 346.

So with the second assignment of error. After the same witness had testified without objection that he had seen the effects of a gunning shot, he was asked how far the flame extended. The objection was that this evi dence was wholly immaterial as to what happened on the third right of the White Ash Mine, in regard to a gunning shot before this explosion. The witness stated: "Seventy feet, as far as I knew." The defendant sought to show, among other things, that the explosion might have been caused by the effects of a gunning shot, it being shown that in room 16 there were indications of a shot where all the coal was not blown away, but a part of the hole remained, showing there had been something like a gunning shot there. It has been held by this court that ordinary witnesses might testify how far sparks were thrown from other locomotives than the one which it is claimed set out the fire.

Grand Trunk Ry. Co. v. *Richardson et. al.*, 91 U. S., 454.

We fail to see how the answer to the question set out in the third assignment could have been prejudicial. The witness answered that the effect of a powder explosion, and the flame thereof coming in contact with small quan-

tities of gas, would ignite the gas. The objection to the question was that it involved an assumption that there were small quantities of gas in the mine which would not be dangerous except in the case of a powder explosion. The evidence was not prejudicial, because everyone knows the gas would be ignited if the flame came in contact with it. But the objection to the question is unsound, because the evidence showed that there would be necessarily small quantities of gas in crevices and uneven places in the roof of the rooms. Witnesses testified to there being small cups of gas here and there which would not be at all dangerous to the working of the mine.

The fourth assignment is in respect to a question the answer to which is that men drilling holes may tap gas or a certain break in the roof where gas is given off from the adjoining strata, and that gas is liable to appear. This the witness was competent to testify to from his own experience in that mine, as well as in other mines. The objection to the question was that the witness testified that he saw no evidence of gas in the fourth left at the time of this explosion, and that this was a request to the witness to speculate as to what might have been or might have happened. The evidence is far more unobjectionable than much that was introduced by the plaintiff herself. The evidence was proper to show the reasonable probability of the explosion occurring in room 16 or 17, while the miners would be drilling their holes or working about the coal, in suddenly tapping a seam of gas. This was one of the probable things likely to occur to the miner, and likely to cause an explosion, and would be one of the facts which would more rationally account for the cause and effects of the explosion in and about room 16 than the other theories put forward by plaintiff.

While the question complained of in the fifth assignment may not be artistically framed, yet it is clear no prejudice resulted from the answer. The witness stated that if two men went into room 8 and found the brattice down, and had seen the danger signal lying across the track, they would have fixed the brattice up, and would never have crossed that line—meaning the danger line. The evidence was simply in answer to a question suggested by testimony brought out on the cross examination. We fail to see how it could possibly have prejudiced the plaintiff, for the evidence of plaintiff's own witnesses was to the effect that no one in that mine would cross the danger line or signal if he saw it. The witness was simply attempting to testify as to the duty of the men who should find a brattice down. That is, they would fix it up. The question was provoked by the cross-examination.

The refusal of the court to permit an answer to the question set out in the sixth assignment was proper. The question was asked on cross-examination of one of defendant's witnesses. He had not been asked on his direct examination a single question in respect to the means or want thereof of moving water from any part of the mine. The defendant did not vouch that he had knowledge on this subject, and did not ask him concerning the same. The rule is well settled in this court that the cross-examination must be strictly confined to matters brought out in the direct examination.

The answer of Duggan to the question set out in the seventh assignment of error was proper. It was proper to show that the stoppings in the various cross-cuts of the White Ash Mine were of a kind accustomed to be used and placed in mines of that character for the pur-

pose of diverting the air current to the proper places; for if this was the custom in operating other coal mines of a similar character the evidence would have a tendency to show that the White Ash Mine was operated in the usual manner, and that the method adopted of diverting the air into a channel was the usual one. The objection seems to have been mainly to the competency of the witness; but he testified that from the age of thirteen he had been more or less working in and around mines. The court below adjudged him to be competent. Besides, the witness had read a great deal concerning the workings of coal mines, and he had gained knowledge in various ways, and would therefore be competent to speak upon that subject.

In the eighth assignment of error it appeared that the witness Duggan had been asked whether he knew that for ten days or two weeks before the explosion there was an opening from the return air course to the upper air course leading to the plane of the fourth left, whereby air went to the men on that plane and thence to the third left, without going to the other working places, and he stated he did not know of any such opening. He was then asked the question:

"If such an opening were made by the fire boss under the directions of the mine foreman, should it have been reported to you?"

This was objected to as improper cross-examination, and as being a hypothetical question based upon facts not testified to by the witness or anybody else; and the objection was sustained. It seemed to involve, after all, merely a question of moral obligation or duty whether such fact should have been reported to him. It was not stated, either, what the purpose of this testimony was

nor what it would tend to show. It was not proper cross examination. An answer could not have elicited any fact relevant to the issues.

In respect to the ninth assignment of error, it appeared that on cross-examination by the plaintiff the witness Duggan had testified that after the explosion they were working a force of men night and day getting the mine into working condition from the results of the explosion, before the investigation by the coroner's jury. The question was then asked:

"Unless that had been done, it would have been impossible to go into the mine, would it not, Mr. Duggan?"

This was objected to as calling for the opinion of the witness, and facts speak for themselves. The objection was sustained, and properly. It was wholly immaterial, for that matter, what was necessary to be done after the explosion to get the mine in working order. The question called for the conclusion of the witness upon an immaterial point. This had no tendency to prove the condition of the mine before the accident, the cause of the explosion, or the alleged negligence.

Columbia Rld. Co. v. *Hawthorne*, 144 U. S., 202–207.

The tenth assignment of error is one which should never have been made in this court. It is trivial and was simply the culmination of a series of badgering questions.

It is, however, apparent that none of the evidence objected to or offered could have affected the result or supplied the lack of evidence to support the plaintiff's case, and, therefore, plaintiff could not have been prejudiced by any ruling made.

SECOND: AS TO THE INSTRUCTIONS.

It would have been improper for the court to charge the jury that the plaintiff was entitled to recover, and this disposes of the eleventh, twelfth and thirteenth assignments of error.

In respect to the other assignments on the instructions given, it must be remembered that the plaintiff did not ask any instructions which were not given, except the peremptory one. It is not proper to single out any one clause or paragraph, but the charge should be examined as a whole, and one instruction or paragraph must be viewed in the light of others given.

Spring Co. v. *Edgar*, 99 U. S., 659.

The instructions as a rule were more properly objectionable and rather erroneous as to the defendant than as to the plaintiff.

The third instruction given set out or called attention to the various general charges of negligence in the declaration, and in the sixth instruction the jury were advised that if the allegations of a single count of the declaration were established by a preponderance of the evidence, the plaintiff was entitled to recover. This was unfavorable to the defendant and too favorable to the plaintiff, under the law; for it led the jury to infer a duty on the part of the defendant from the general and uncertain allegations in the various counts of the declaration. The eighth instruction called the attention of the jury to the act of Congress, although no count in the declaration was framed to charge a violation of any statutory duty, and although it is apparent that the court misconstrued this statute in favor of the plaintiff. In the ninth instruction the court defines in general language

what constitutes negligence, and this instruction was certainly more favorable than the plaintiff was entitled to in respect to the duty of the defendant as to the care to be exercised in operating the mine. The tenth instruction defined the duty of the master to use reasonable care and diligence to provide a reasonably safe place for the servant to perform the respective duties and to provide reasonably safe appliances for the protection of his servants and use reasonable care to keep such appliances in reasonably safe condition for the protection of his servants ; that this duty could not be delegated, and that any agent or servant appointed by him for the purpose of looking to the safety of appliances, without regard to rank or station, would be a representative of the master. This is stronger in favor of plaintiff than the law would warrant in respect to coal mining, due to the changing condition of the working places, as shown heretofore. In the eleventh instruction the court advised the jury that if they believed from the evidence that fellow servants of the deceased by their negligence contributed to bring about the explosion in which the deceased were killed, yet if they believed from the evidence that the negligence of the defendant also contributed to the same result they should find a verdict for the plaintiff, unless they believed from the evidence that the plaintiff's intestates knew or had means of knowledge of such negligence of the defendant, and notwithstanding such knowledge or means of knowledge continued to work in the mine. This seems to have been appropriate under the rulings of this court, and was not objected to by plaintiff. So the twelfth instruction advised the jury that it was obligatory upon the defendant to keep the working places of the mine free from standing gas, and that if a failure

to do so contributed to the death of the deceased, they were justified in believing the defendant guilty of negligence.

In the fourteenth instruction the jury were advised that if they believed the explosion originated in room 8, in consequence of the accumulation in said room of a dangerous body of gas, merely guarded by a fire-mark or danger signal, for thirty-six or forty-eight hours before the explosion, and that the intestates did not consent or agree to work in said mine with places dangerous because of gas merely guarded by fire-marks or danger signals for thirty-six or forty-eight hours, the plaintiff was entitled to recover, although the jury might also believe that said body of dangerous gas was ignited by the negligence of fellow servants. This was much stronger than the plaintiff was entitled to.

The assignments of error challenge instructions Nos. 1, 6, 10 and 11, hereafter referred to, given at the request of the defendant.

Instruction No. 1, set out in the fourteenth assignment, was proper in itself, and is in accordance with the well-settled law. It is also to be read in connection with the other instructions given. It is correct as a general proposition.

A. T. & S. F. R. Co. v. *Wagner*, 33 Kans., 660, 666.

Hayden v. *Mfg. Co.*, 29 Conn., 548, and argument heretofore made.

It is not necessary that every instruction or paragraph should embody every phase or theory of the case. The criticism made is not candid, and plaintiff hunts for a construction not warranted in the language used.

The sixth instruction requested by defendant and complained of in the fifteenth assignment was proper so far as plaintiff is concerned. In itself, it is simply to the effect that if, according to the plaintiff's theory, the gas was ignited by Flick and Kelly going into room 8, and if the signals described, warning miners of danger and well known to them, were there and placed in such manner as to be observed by Flick and Kelly, and if the meaning thereof was understood by them and they were known by the miners (necessarily including the deceased) to be in use to inform them of the presence of gas in dangerous quantities, then if the explosion was caused by Flick and Kelly going into the room with a naked light, the defendant would not be liable. This matter has been discussed heretofore. Under such circumstances, there was no culpable negligence in the defendant, and the sole cause of the accident, if it so happened, would be the negligence or disregard by Flick and Kelly of the precautions adopted. The instruction should not be tortured to mean what it does not; but, if anything, should be read in the light of the other instructions given. The instruction contemplates the case in which the deceased (as included in the miners) knew of the precaution adopted to indicate gas, and of the custom and the rule in regard to going into such a place with a naked light. It must also be read in view of the undisputed facts under the evidence.

The deceased would be the first to discover if the air current were bad, but the evidence wholly failed to show that it was not sufficient, or that the water in the fourth left air course so obstructed the current as to render the same insufficient.

Instruction 10, complained of in the sixteenth assign-

ment of error, was perfectly proper. It lays down the law as to the presumption in favor of the defendant, and that the burden of proof is upon the plaintiff to show negligence and to overcome the presumption of care on the part of the master. Such an instruction has always been held proper in the Federal courts. Indeed, they have gone much further, and have usually commented upon the evidence, and to such practice this court has never found objection, but has rather commended it. It ignores no duty, whether imposed by statute or otherwise. They are trying now to insist upon an objection not pointed out at the trial (see marg. p. 485), merely for the purpose of making some point on the act of Congress not discussed at the trial and not relevant under the issues. The concluding part of the instruction is wholly ignored. The rule of evidence stated is correct.

Cogan v. *Burnham*, 56 N. E., 585, 586, and argument heretofore made.

The eleventh instruction, set out in the seventeenth assignment, was proper under plaintiff's theory and contention. While all the witnesses testified to the universal custom that everyone was forbidden to pass over a danger signal with a naked light by reason of the signal itself, one witness testified that this was the rule and order. (Marg. p. 149.) While, perhaps, there was no written rule or order, it was a well-understood instruction, and a rule which was proved also by the custom and fairly deduced from such evidence. The placing of the fire signal was enough to forbid Flick and Kelly or any one else going beyond the same with a naked light, and the plaintiff's theory or assumption is that there was gas in room 8 which was ignited by Flick or Kelly going up to the

same with a naked light. If this instruction contained an improper assumption, plaintiff's theory of the case is improper, and plaintiff cannot complain of an assumption which she has insisted upon to sustain her position. If there was no evidence upon which to base this instruction there was certainly not sufficient evidence upon which to base a liability in the defendant.

The instruction is correct under the authority of *Berns* v. *Coal Company*, 27 W. Va., 285, and authorities cited heretofore. Examined in connection with the undisputed facts it could not be held erroneous. It was established that gas was likely to accumulate in different places and that the precaution adopted against danger was the fire signals, and this was well known to the deceased and was the usual precaution.

Under the seventh head, on page 57, the eighteenth and nineteenth assignments of error are discussed. They are without the slightest merit. Plaintiff did not ask any instructions which were not given. The propositions attempted to be discussed were not embodied in any written request as required by the New Mexico Statute. Sec. 2685, Sub-Section 128, p. 708, Compiled Laws New Mexico, 1897, provides:

"When the evidence is concluded *and before the cause is argued* or submitted to the jury, or the court sitting as a jury, either party may move the court to give instructions on any point of law arising in the cause, *which shall be in writing and shall be given or refused*," etc.

No error can be predicated upon failure to give an instruction not requested in writing. If any of the instructions complained of were not broad enough to cover every phase or theory of the case plaintiff might have asked a modification or presented other instructions. The

general instructions gave all the law necessary. If plaintiff wished the court to instruct upon a special hypothetical theory of the facts, such as that Donahue himself caused the explosion, though the evidence would not justify such an assumption or instruction, she should have asked for the same.

Again, rule 17, set out on page 58, is referred to. Much is sought to be made of the provision: "The mine-boss will personally examine the mine and know all parts thereof are in a safe condition." The plaintiff did not ask an instruction based thereon, and if the speculation is to be indulged in that Donahue caused the explosion, which in the light of the evidence is absurd, yet he was simply performing the acts of a workman at the time, and the cause, if plausible, would be due simply to his negligence as a fellow workman. But rule 17 would not alter the rule of non-liability of the master at common law. If a statute which required the employment of such a boss and prescribed similar duties could not be held to alter the rule of fellow servants, certainly this rule does not alter the same. Neither does the rule in terms show that the master assumes responsibility or liability for the negligence of the mine loss any more than he would for all other employes, who, under the rule, are to report unsafe places to the mine boss. The mine boss was appointed and his duty prescribed; the rule was complied with by the company in so doing.

Neither was it necessary for our opponants to waste time in placing the instructions in parallel columns, as under the eighth head on pages 59, 60 and 61. To the fourteen instructions, which appear to have been given by the court, no objection whatever was taken by plaintiff. Perhaps some were requested by her. These in-

structions were more favorable than she was entitled to under the law and the evidence in this case, but the mere fact that these were given is certainly a poor argument to prove that other instructions given at the request of the defendant, and somewhat more specific in their nature, and which limited somewhat the effect of those given by the court, were therefore erroneous. The instructions given by the court were incorrect from the defendant's, and not the plaintiff's, standpoint, for the plaintiff was not prejudiced by them.

RULING OF THE TRIAL COURT ON MOTION FOR NEW TRIAL.

It was contended before the Territorial Supreme Court and it is still insisted that the trial court erred in overruling the motion for a new trial, because it appeared in the journal entry that the motion was overruled on the ground that there was a conflict of evidence in the cases, and the court was of opinion that in such a case it had no jurisdiction to set aside the verdicts as against the weight of evidence.

The Territorial Supreme Court seems to have taken no stock in this argument. It is difficult to understand what the trial court meant. Whether it meant there was a conflict of evidence upon the material issues or merely a conflict on some minor points or questions is uncertain. If this court had the power (which it does not seem to have—*C. B. & Q. Rld.* v. *Chicago*, 166 U. S., 242 to 246) to grant a new trial on the weight of the evidence and overrule the lower court for failure to do so, we would have no objection to discussing such question, because it is clear that the evidence was wholly insufficient to support a verdict for the plaintiff. It is not pretended that the court could do in this case what was done by the Circuit Court

of Appeals for the Sixth Circuit in *Felton* v. *Spiro*, 78 Fed., 581, where the case was simply sent back to the lower court, with instructions to reconsider a motion for a new trial. No new trial, however, was granted by the Circuit Court of Appeals in that case. It did not pretend to have that power, and it is admitted in the case at bar that the judge who tried the cause is no longer in office. So it would be useless to send a case back to him to reconsider his action on a motion for a new trial.

In the case of *Clyde Mattox* v. *United States*, 146 U. S., 140, cited by plaintiff in error in her former brief, this court simply held that the trial court erred in not admitting as evidence and then taking into consideration on a motion for a new trial affidavits concerning the misconduct of jurors, and for other errors committed a new trial was granted.

We are willing this court should review the entire evidence, as we are confident that in so doing it would hold that a verdict should have been directed for the defendant.

As the plaintiff was not prejudiced, we respectfully submit that the judgment should be affirmed.

ROBERT DUNLAP,
Attorney for Defendant in Error.

E. D. KENNA,
R. E. TWITCHELL,
Counsel.

No. 269.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1899.

No. 269.

JOSEPHINE DESERANT, ADMINISTRATRIX, &C.,
PLAINTIFF IN ERROR,

vs.

CERILLOS COAL RAILROAD COMPANY.

OPINION OF THE SUPREME COURT OF THE TERRITORY OF NEW MEXICO IN CERILLOS COAL RAILROAD CO. vs. DESERANT, 49 PACIFIC REPORTER, 807.

CERRILLOS COAL R. CO.
vs.
DESERANT.

(Supreme Court of New Mexico, August 6, 1897.)

Injury to servant—Vice-principal—Dangerous premises—Assumption of risk—Master and fellow-servant—Combined negligence—Fellow-servants—Cause of accident—Conflicting theories—Competency of servants—Statutory precautions—Negligence—Damages.

1. A coal mining company's employé, whose duty it is to make rounds of inspection, and advise the miners as they go to work of the condition of their places as to the presence of dangerous gases, represents the company in the discharge of that duty.

2. A coal mining company was accustomed to place a danger signal on rooms in which standing gas had been detected, and such signal was well understood by all employés to be an imperative command prohibiting entrance with a naked light into any room or place where danger was thus indicated. There was no danger from the standing gas if it were not ignited. An employé went to work in the mine with knowledge of the rule, and that an explosion in another room would endanger life in his own room, and relying on his fellow-servant's observance of the danger signal. *Held*, that he assumed the risk, and the company was not chargeable with negligence in not providing a safer place in which to work.
3. Where there is combined negligence of a master and a fellow-servant, a servant is precluded from a recovery for personal injuries if the master's negligence was known to him, and acquiesced in without complaint, and was the efficient proximate cause of injury.
4. A coal mining company's employés who assist in the getting out of coal, without actually drilling holes or doing any blasting with powder, are fellow-servants of employés who are so engaged, and are paid according to the quantity of coal mined.
5. In an action for injuries causing death, where there are two theories of the accident, one exempting defendant from liability and the other not, and there is evidence to support both, it is error to fail to submit both theories under appropriate instructions.
6. A master's duty to see that his servants are competent is discharged when he has taken all reasonable precautions to inquire into the competency of one proposing to enter his service, and, as a result, is satisfied that the applicant is competent.
7. It is error to submit an issue not raised by the pleadings or evidence, where it carries into the case many details calculated to mislead the jury and draw their minds away from the questions at issue.
8. Where it is purely speculation as to which of two ways an explosion causing injuries originated, verdict should be for defendant, if by either or both defendant was exempt from liability.
9. Under act of Congress, March 3, 1891, providing that managers of coal mines shall provide adequate ventilation, but not prescribing the means to be adopted, failure to comply with the requirement is not negligence *per se*, but a reasonable effort must be exerted to maintain such ventilation, and if this were not maintained, it is for the jury to say whether, under all the circumstances, the failure was due to negligence of the manager.
10. In an action for injuries causing death, the measure of compensatory damages is the present worth of the life of deceased, determined by the jury from the evidence as to age, earning capacity, health, habits, and probable duration of life; but with nothing added by way of solatium to the distributees, and nothing for suffering by deceased.

11. To give exemplary damages against a corporation in an action for injuries causing death, it must be shown by a preponderance of evidence that defendant exhibited such entire want of care as showed a conscious indifference to consequences, or participated in a bad intent.

Error to district court, Santa Fé county; before Justice N. B. Laughlin.

Action by Josephine Deserant, administratrix, against the Cerrillos Coal Railroad Company for the death of plaintiff's intestate.

From a judgment in favor of plaintiff, defendant brings error.

Reversed.

H. L. Waldo and R. E. Twitchell for plaintiff in error.
N. B. Field and F. W. Clancey for defendant in error.

COLLIER, *J.*:

For convenience, the parties to this record will in this opinion be referred to as they appeared in the lower court—*i. e.*, plaintiff in error will be called defendant, and *vice versa*. This is an action by the administratrix of Henri Deserant, deceased, against the Cerrillos Coal Railroad Company, in which damages are claimed for negligence in causing death in its mine, called the "White Ash mine," on Wednesday, February 27, 1895, as a result of an explosion occurring about 10.45 o'clock in the forenoon. The declaration charges the negligence in various ways conducing to bring about or cause said explosion, but the evidence will be at present considered only as it bears upon the theory which plaintiff's counsel have most insistently urged upon us. This theory is that in room 8 of the fourth left entry of said mine defendant negligently permitted to accumulate and to remain standing for at least 48 hours prior to the explosion gas in dangerous quantity and ratio to the surrounding air, and

that the explosion occurred in the presence of the ordinary naked lighted miners'-cap lamp, and that the same was exploded by employés of the company, producing after-damp, fatal to life, and causing the death of plaintiff's intestate in room 17 of said fourth left entry, the working place to which he had been sent by defendant. It appears that by this explosion all the employés, 23 in number, who were at the time in the fourth left entry (except those in what was called the "plane") were killed, and therefore all evidence to show how the explosion occurred and where was its initial point is necessarily circumstantial.

The fire boss was an employé whose duty it was to inspect the working places and inform miners, like deceased, who work by contract—*i. e.*, were paid according to the quantity of coal mined—of the condition as to safety of their working places; and he told, or, as he expresses it, he must have told, the deceased that his working place was safe when he went to work at 7 o'clock on the morning of the explosion. As to this duty, the fire boss must be considered, we think, beyond question, as representing the defendant. Thus it is expressly held in Cullen *vs.* Norton, 52 Hun., 9; 4 N. Y. Supp., 774, that a foreman intrusted with the performance of work stands in the place of and represents the master in assigning the servant to his place of labor. And in Railroad Co. *vs.* Herbert, 116 U. S., 642; 6 Sup. Ct., 590, it is held that "if no one is appointed by a railway company to look after the condition of its cars and see that the machinery and appliances used to move and to stop them are kept in repair and good working order, it is liable for the injuries caused thereby. If one is appointed by it, charged by it with that duty, and the injuries result from his negligence in its performance, the company is liable. He is, so far as that duty is concerned, the representative of the company."

The fire boss had, in his round of inspection two days before the explosion, discovered standing gas in said room 8 (how much does not appear), which caused him to place

therein a danger signal, being what is known as the "fire boss' danger mark, a double X, or XX, with date and initial letters of his name. It is shown that such a signal was well understood by all employés to be an imperative command forbidding entrance with a naked light into any room or place where danger was thus indicated. The fire boss did not go again into room 8 until after the explosion, nor is there anything to show that any effort was made to clear this room of standing gas, which, by means of the safety or Davy lamp, he had detected there, notwithstanding that room 8 was considered the worst room in the mine for generating gas. It does not appear in precisely what place in room 8 the danger signal was placed, the fire boss merely saying it was "above the last cross-cut." After the explosion there were found in this room the corpses of two miners, Kelly and Flick; that of Kelly in the cross-cut and that of Flick in the center of the track, about the end—that is, half way up between the cross-cut and the face of the room, about 45 feet from the cross-cut. A tie with fire-danger mark on it was found lying across the track opposite the cross-cut. The track was partially taken up. There were implements there commonly used for such purposes, and there were there also two miners' caps and the lamps which carry a naked light, which indicated that Kelly and Flick had gone to room 8 to take up the track, and had partially succeeded when the explosion occurred. According to the plan of ventilation the air should, as to the rooms in the fourth left entry, have gone first to room 18, and by brattice or curtains been carried around its face, thence by cross-cut to room 17, carried around face, and so on to the rooms lower numbered in consecutive order, until arriving at the third left entry air course, being drawn through all air courses and entries by an exhaust fan at the exit from the mine. It is agreed also between all witnesses that a gas explosion in a mine invariably flies against the air, and therefore, if there were an explosion in

room 8, it would have flown toward room 17, where the body of plaintiff's intestate was found, if air were circulating, as the testimony shows, through the fourth left entry of said mine. Defendant produced a considerable amount of evidence showing air circulation, and what was produced by plaintiff tended to show, at most, only a partial obstruction of the fourth left air course, diminishing, but not destroying, the current, the effect of which will be considered in another place in this opinion. We may assume, therefore, that there was undoubtedly some air current, because this seems necessary for plaintiff's theory of the effect of the explosion being carried back to room 17, and, further, because there is nothing tending to show the entire absence of an air current going in the direction intended.

The rule adopted in the White Ash mine of the fire boss making rounds of inspection and advising miners as they went to work of the condition of their places as to safety, and the fact that all employés well understood that danger signals were used in the mine to prevent entrance into particular places or rooms, presupposed that deceased and his coemployés knew that work was or might be carried on without cessation though there might be standing gas in places or rooms of the mine, and that they understood, when informed that their working places were safe, that such representation did not mean there was no standing gas in the mine or in any particular entry of the mine. It can hardly be denied that if the fire boss, on the morning of Deserant's going to work in room 17, had expressly told him there was standing gas in room 8, but it was marked with a danger signal, and Deserant had, nevertheless, gone to his place to work, the presence of such gas could not be urged as negligence by defendant causing his death unless it were also shown that the room was not danger-marked. If the evidence shows that he impliedly agreed to such a condition, the same conclusion should follow. In Sullivan *vs.* Manufacturing Co., 113

Mass., 396, Devens, J., states the rule to be that "where the servant assents to occupy the place prepared for him and incur the danger to which he will be exposed thereby, having sufficient intelligence and knowledge to enable him to comprehend them, it is not a question whether such place might, with reasonable care and by a reasonable expense, have been made safe. His assent has dispensed with the performance on the part of the master to make it so. · Having consented to serve in the way and manner in which the business was conducted, he has no ground of complaint, even if reasonable precautions have been neglected." If in the case at bar "the business was conducted" by placing a danger signal where there was standing gas, it will not do to say the defendant should, in addition, have placed a man on duty to watch and warn against entrance with naked light, because it might be thought, as a reasonable precaution, such was demanded. In Naylor *vs.* Railway Co. (Wis.), 11 N. W., 24, it is held that "if a servant, knowing the hazard of his employment as the business was conducted, is injured while employed in such business, he cannot maintain an action against the master for such injury, because he may show there is a safer mode in which the business might have been conducted, and that had it been conducted in that way he would not have been injured." To the same effect, also, is Hewitt *vs.* Railroad Co. (Mich.), 34 N. W., 659. In Sheets *vs.* Railway Co. (Ind. Sup.), 39 N. E., 154, it was ruled that "where the foot of deceased was caught in an unblocked switch, and he is run upon and killed by the careless act of the engineer in kicking cars with great and unnecessary force, the railway company was not liable, because it was the act of a fellow-servant, and the fact of the frog being unblocked does not change the rule, as that was a danger known to the deceased, making the accident a risk incident to the service." Before that the Indiana supreme court held to the same effect in Railroad Co. *vs.* Henderson, 33 N. E., 1021, where

the defect known to the plaintiff and defendant alike was in the road-bed. The two cases just cited show defects which it was the plain duty of the master to have remedied, but knowledge and an appreciation of danger by plaintiffs were held to defeat their action. It is not suggested anywhere in argument that Deserant did not thoroughly realize that if an explosion occurred from standing gas in the vicinity of his working place his life would be endangered. He was a man 53 years of age, was a miner by occupation, and had worked formerly in the White Ash mine, and again for seven weeks immediately prior to his death. It can scarcely be thought that, if he supposed that the danger signals were negligently or willfully disregarded, his life would not not be jeopardized by explosive gas.

To similar effect of the cases above cited are those of Ladd *vs.* Railroad Co., 119 Mass., 412; Hayden *vs.* Railway Co., 29 Conn., 548; Goltz *vs.* Railway Co. (Wis.), 44 N. W., 752, and Haley *vs.* Lumber Co. (Wis.), 51 N. W., 321. Our Supreme Court has also held that the "rule of law perfectly well settled" is as follows: "If the servant, before he enters the service, knows, or afterwards discovers, or if, by the exercise of ordinary observation or reasonable skill and diligence in his department of service, he may discover, that the building, premises, machine, appliance, or fellow-servant in connection with which or with whom he is to labor is unsafe or unfit in any particular, and if, notwithstanding such knowledge, he voluntarily enters into or continues in the employment, without objection or complaint, he is deemed to assume the risk of the danger thus known or discoverable, and to waive any claim for damages against the master in case it shall result in injury to him" (Alexander *vs.* Mining Co., 3 N. M., 255; 3 Pac., 740). In the case of Railroad Co. *vs.* Baugh, 149 U. S., 368; 13 Sup. Ct., 914, it is said that "where the master has performed his duty in providing his servant with a reasonably safe place at which to work, he is not liable to any one of his servants for the acts

or negligence of any mere fellow-servant, or coemployé of such servant, where the fellow-servant or coemployé does not sustain a representative relation to the master." Again, in the Baugh case it is said, "If the act is one done in the discharge of some positive duty of the master to the servant, then negligence in the act is the negligence of the master; but, if it be not one in the discharge of such positive duty then there should be some personal wrong on the part of the employer before he is held liable therefor." If the doctrine laid down by the Massachusetts supreme court in the Sullivan case, *supra*, is correct, and the defendant had complied with its positive duty to the satisfaction of plaintiff's intestate, there was certainly no personal wrong done by it, and then if explosion came from ignition by the naked lamp of Flick or Kelly entering room 8, that was the act or negligence of the co-employé. In the Herbert case, *supra*, the court approved the decision in Beeson *vs.* Mining Co., 57 Cal., 20, as being in harmony with its own views where the injury ensued from the defective pipe put in by a tinner, which defective pipe caused a fire and death of plaintiff's intestate, holding that for such a pipe the master was responsible, but the decision expressly states that "it did not appear that the deceased knew or had reason to know of the defect." In Railroad Co. *vs.* McDade, 135 U. S., 554; 10 Sup. Ct., 1044, it is held that employers "are bound to use all reasonable care and prudence for the safety of those in their service, by providing them with machinery reasonably safe and suitable for the use of the latter. If the employer or master fails in this duty of precaution and care, he is responsible for any injury which may happen through a defect of machinery, which was or ought to have been known to him, and was unknown to the employé or servant. But if the employé knew the defect in the machinery from which the injury happened, and yet remained in the service, without giving any notice thereof to the employer, he must be deemed to have assumed the risk of all danger reasonably

to be apprehended from such use, and is entitled to no recovery." In Kane *vs.* Railway Co., 128 U. S., 91; 9 Sup. Ct., 16, Harlan, J., says: "It is undoubtedly the law that an employé is guilty of contributory negligence, which will defeat his right of recovery for injuries sustained in the course of his employment, when such injuries substantially resulted from dangers so obvious and threatening that a reasonably prudent man, under similar circumstances, would have avoided them if in his power to do so." The horns of a dilemma seem here presented to plaintiff. If standing gas in this mine was an obvious danger, the deceased was guilty of contributory negligence. If it was not in fact an obvious danger, it was only because deceased relied upon observance by his co-employés of the rule forbidding entrance into a room where a danger signal was posted. There is nothing to indicate in any way that there was any danger from this standing gas, if it were not ignited by going into its presence with a naked light; and if this were provided against in a way known to deceased the existence of standing gas cannot, we think, be considered as making his place unsafe, or, if unsafe, only in such a way as he assented to. In Hough *vs.* Railway Co., 100 U. S., 224, it is said that "if the engineer, after discovering or recognizing the defective condition of the cow-catcher or pilot, had continued to use the engine, without giving notice thereof to the proper officers of the company, he would undoubtedly have been guilty of such contributory negligence as to bar a recovery, so far as such defect was found to have been the efficient cause of the death." It would be strange if it could be argued that, though an action by the engineer could not be maintained under such circumstances, yet the fireman, having similar knowledge and continuing without complaint to ride on the engine used by an engineer, could recover. In District of Columbia *vs.* McElligott, 117 U. S., 621; 6 Sup. Ct., 884, it was held, in effect, that if the jury deemed it reckless carelessness in a laborer to work near a

ngerous bank for any length of time, however brief, then he ld not recover, though injured while waiting the fulfill- nt of the master's promise to send assistance so as to guard n against apprehended injury. There is no lack of recogni- n by us of the well-established doctrine that where there is nbined negligence of an employer and fellow-servant, the ster is liable for injury inflicted in the course of employ- nt. But the cases we have referred to show, even if we ncede failure of duty in this case on the part of the mine- ner, that if such failure is known and acquiesced in with- complaint, and is the efficient, proximate cause of injury, servant is precluded from recovery. All these cases we ve cited are in entire accord with Railway Co. *vs.* Cum- ngs, 106 U. S., 700; 1 Sup. Ct., 493, which states the neral principle of liability of the master where he con- outes to the injury, as this case speaks in no way of owledge of defects or of failure of duty of employer had the injured servant; and as far as our investigation has ne none of the cases following this principle deny the ct of knowledge by the employé killed or injured.

f Flick and Kelly were fellow-servants of deceased, and vas by their act or negligence, in disobedience of the im- rative command given by the danger signal, that death sued, it seems clear no recovery can be had upon the ory of explosion originating in room 8. In this we have umed that deceased agreed to work in the White Ash ne, with rooms containing dangerous gas, merely guarded a fire-mark or danger signal—at least there was evi- nce altogether sufficient for the court to have explicitly tructed the jury on this question, and it wholly omitted do so; but we will discuss the court's instructions ther on. While there are many decisions from which it ght be strongly argued that the standing gas in room 8 ld not be considered the proximate cause of the death of plaintiff's intestate, because the act of Flick and Kelly s an intervening act of such character as to break

the chain of causation, and because it was not probable or reasonably to be expected, with the safeguards employed to prevent entrance into a room where there was standing gas, that an explosion and consequent death would occur, yet, upon the principle rigidly stated in the Cummings case, *supra*, it seems to the writer, at least, that these decisions, among which are those of Sheffer *vs.* Railway Co., 105 U. S., 249, and Railroad Co. *vs.* Kellogg, 94 U. S., 469, and the argument upon which they proceed, do not apply. It is preferred, therefore, to place our conclusion upon the ground that the master in this case is not shown to be guilty of negligence of which plaintiff's intestate can complain, as he accepted, or at least there is evidence tending to show that he accepted, employment with an implied waiver as to there being standing gas in places in said mine, provided they were guarded by a danger signal. If injury resulted from a fellow-servant's act or negligence under such circumstances, such injury must be considered to have arisen from the risk incident to the employment. That Flick and Kelly were fellow-servants of the deceased, they being "companymen," employed in assisting in the getting out of coal without actually drilling holes or doing any blasting with powder, as deceased was engaged in doing, we hold to be clear; and, without discussing the question so much gone over, we again cite the Baugh case, *supra*, and also that of Railroad Co. *vs.* Charless, 162 U. S., 359; 16 Sup. Ct., 848. We will close the discussion of this branch of the case by quoting from the case of Berns *vs.* Coal Co., 27 W. Va., 285, as follows: "If, therefore, it appears that the proprietors of the mine had been negligent in permitting fire-damp to accumulate in their mine, which would not produce any injury until ignited, and if it were ignited by a fellow-servant who went into the dangerous part of the mine with a lighted lamp, contrary to the orders of the proprietors of the mine, and by such lighted lamp the fire-damp was ignited and exploded, by which the servants were injured, such explo-

sion and injury would be directly and immediately caused by the act of the fellow-servant, and not by the negligence of the master, and the master would not be responsible for such injury."

The other theory advanced as to the explosion is that it was not simply a gas explosion, but was a gas and powder explosion, originating in one of the rooms in the fourth left entry, where work in getting out coal was going on, these rooms running from 12 to 18, inclusive, and that it was caused by what is known as a "gunning or windy shot." This kind of shot was described as being caused by an insufficiency of powder to break the coal, or from insufficient or careless tamping. In either event there would issue from the hole drilled into the coal a sheet of flame, extending in some instances a distance of 60 or 70 feet. This flame, it was testified, would ignite dust, impregnating the air and cause explosion where the gas only amounted to 1½ to 2 per cent., so small as not to explode in the presence of naked lights carried on the caps of the miners. These gunning or windy shots are shown to "occur occasionally, but are not a regular occurrence." This theory was sought to be maintained by the defense. In the brief of its counsel it is urged that a windy or gunning shot is evidence of negligence by fellow-servants, and that if an explosion so occurred the defendant should be held exempt from liability. In the first place, it is not at all clearly shown that such a shot is evidence of negligence, and even if it were we do not think that under the Cummings case, *supra*, such would necessarily excuse the defendant from liability. These shots were not so rare as to be improbable, and there was testimony pro and con as to the quality of the air. If the jury believed from a preponderance of the evidence that the air was bad and made so by partial obstruction of the air course, and that such obstruction was negligence of the defendant, which resulted in the accumulation of gas of sufficiently large percentage to be exploded by a gunning shot, and they further

believed that defendant should have reasonably anticipated such accumulation from this cause, the fact that gunning shots evidenced contributory negligence by fellow-servants would not prevent the returning of a verdict against the defendant. It appears in evidence that the presence of this gas is not perceptible to the senses, and that it is an insidious and not an obvious danger. The jury might believe, under proper instructions, that deceased would not be guilty of contributory negligence in continuing at work until an explosion resulted from a gunning shot, or that the mere presence of bad air, if there was bad air, was a sufficient warning to him to retire to safety, as it is in testimony that frequently the air would be better and worse in the mine. If, however, the jury should believe that defendant caused to circulate through the mine the statutory quantity of air, and that an explosion nevertheless occurred, whether from a gunning shot or by ignition from naked lights, because of an accumulation of gas casually occurring, then defendant should not be held liable, as to hold otherwise would be to make defendant a guarantor of safety in the working places, when instead an explosion from an accumulation of gas so casually occurring is to be considered a risk incident to the employment in which deceased was engaged. We are unable to say upon which theory the jury found defendant liable in this case, but the court was in error in not clearly drawing to their attention the law applicable to each theory.

These instructions were error also in other respects. Their general import as to everything relating to the duty of the defendant was not that reasonable diligence and care should be exercised by defendant in an endeavor to perform its duty, but that the duty must be performed or it be deemed guilty of "culpable negligence." We so understand instruction 7, and, if it was intended to lessen the severity by No. 8, the language is not explicit enough to effectuate that intention. Thus, in No. 7, the court instructs that it was incumbent on defendant to employ fit, suitable, competent,

and experienced men to operate and manage the mine, while in the Baugh case, *supra*, we find the following language: "If the master has taken all reasonable precautions to inquire into the competency of any one proposing to enter his service, and, as a result of such reasonable inquiry, is satisfied that the employé is fit and competent, can it be said that the master has neglected anything, that he has omitted any personal duty; and this notwithstanding that, after the servant has been employed, it shall be disclosed that he was incompetent and unfit? No human inquiry, no possible precaution, is sufficient to absolutely determine whether a party under certain exigencies will or will not do a negligent act. * * * Therefore, that a servant proves to be unfit and incompetent, or that in any given exigency he is guilty of a negligent act, resulting in injury to a fellow-servant, does not in itself prove any omission of care on the part of the master in his employment." The portion of the instructions of the learned judge that it was incumbent on defendant to employ and use proper, necessary, and suitable machinery and appliances for forcing a sufficient and necessary quantity of pure air into the said White Ash mine, etc., should not have been given, as no attack whatever was made upon the system or plan of ventilation, and this was calculated to mislead the jury and draw their minds away from the questions at issue. The instruction that it was "incumbent on the defendant to keep open all air courses, slopes, cross-cuts, entries, and cross-entries in said mine for the proper, necessary, free, and unmolested circulation of the air in said mine while the men were working therein, and to provide an adequate amount of pure air for the safe and proper ventilation of said mine, for the protection, safety, comfort, and convenience of the men so working in said mine, at the time and immediately prior to the time of the alleged explosion, and at the time of the death of plaintiff's intestate," is also objected to. This is faulty in that it strongly implies that the defendant guaranteed all these things. It is con-

ceded that it is the positive duty of the master to make the place of work reasonably safe; but, again quoting from the Baugh case, we find that this "positive duty does not go to the extent of a guaranty of safety, but it does require that reasonable precautions be taken to secure safety." The including also of all the things mentioned in the instructions, such as keeping open all air courses, slopes, cross-cuts, entries, and cross-entries," and providing for "comfort" and "convenience," etc., has the effect of carrying into the case questions tending to confuse the jury and to make them hunt about for faults committed by the defendant having no bearing upon or connection with the questions involved at the trial. All this may have been done upon the theory that the act of Congress embodied in the instructions required such strict performance by the defendant as to make non-performance not merely evidence of negligence, but negligence *per se*. In the first place, if it might even be held that this showed negligence *per se*, there was no evidence going to show that any slope, cross-cut, entry, or cross-entry was not open, or that the comfort or convenience of any miner was impaired, but there was evidence to show one air course partially obstructed. To the ignition theory in room 8 this part of the instructions could have no reference under the view we have taken of this case.

The act of Congress passed March 3, 1891, provides that managers or owners of coal mines shall provide adequate ventilation of not less than so many cubic feet of air per minute for so many men, and by proper appliances force same through the mine to the face of each working place, so as to dilute and render harmless noxious and poisonous gases, and to keep all working places clear of standing gas. It has been laid down in a recent work of high authority that a breach of statutory duty is negligence *per se* (3 Elliott, Ev., § 1155). Such, however, does not seem to be the view of the United States Supreme Court. That court, speaking by Mr. Justice Lamar, in the case of Railway Co. *vs.* Ives,

144 U. S., 408; 12 Sup. Ct., 679, where the question related to the violation of an ordinance prohibiting the running of trains at greater than a named speed, after noticing the conflict in authority on such question, says: "Perhaps the better or more generally accepted rule is that such an act on the part of the railroad company is always to be considered by the jury as a circumstance from which negligence may be inferred in determining whether the company was or was not guilty of negligence." Breaches of statute or ordinance were similarly treated in the cases of Randall *vs.* Railroad Co., 109 U. S., 485; 3 Sup. Ct., 322; Hayes *vs.* Railroad Co., 111 U. S., 228; 4 Sup. Ct., 369, and Railway Co. *vs.* McDonald, 152 U. S., 282; 14 Sup. Ct., 619. Where the means to be adopted for securing requisite ventilation were not prescribed, but Congress contented itself with general directions, it should be held that reasonable effort is to be exerted to attain and maintain this result. If this result were neither attained nor maintained, it would then be the jury's province to say whether, under all the circumstances, this failure was or was not due to negligence by the defendant.

Instruction 9 should not have been given, as it is not considered that such an instruction had any possible application to this case, except as to violation by Flick and Kelly of the rule against entering places marked with danger signals, and we have already indicated what the court should have done in that regard. All the instructions must be changed, from 7 down to 14, inclusive, on the lines we have indicated, and it is unnecessary to further specially advert to them.

It is our view that, upon the record as it comes before us, the court should have, clearly and in a distinguishing way, submitted to the jury the theories of explosion originating in room 8 and of its originating elsewhere in the fourth left entry of the mine. The instructions should have told the jury in effect, as to the explosion originating in room 8,

that if they believed it there originated, and that deceased consented to work in said mine with places dangerous because of standing gas, guarded by danger signals, and knew or had good reasons to know that the business of the mine was conducted in this way, and should further believe that the standing gas was exploded in such room by the miners Flick and Kelly or either of them, then such explosion was by act of negligence of the fellow-servants of the deceased, and for plaintiff to recover it must be shown to the jury by a preponderance of the evidence that the said room was not danger-marked by defendant at the time Flick and Kelly entered the same with naked lights. The court should have submitted the other theory, upon the proposition of defendant's negligently or not permitting gas to be generated and remain in and around the working places in the mine, upon the lines we have laid down. The court should further have instructed the jury that if it were not shown by a preponderance of the evidence where or in what way the explosion originated, one of the ways exempting from liability and the other not, a verdict should be returned for defendant. We do not intend by this opinion to prescribe any form of instructions, but rather to indicate the general line upon which they should proceed.

Only one other question is it deemed necessary for this opinion to refer to, and that is upon the measure of damages. The personal representative of the deceased is merely the nominal or statutory plaintiff in this action. Thus it appears that she will be a distributee, along with her five children, of whatever may be finally recovered in this action, while as to the two cases consolidated with this upon the trial, she has no pecuniary interest in the result; yet as administratrix of her husband and each of her two sons, all killed at the same time in said fourth left entry, she is the plaintiff in each case. It is plain that the court should not have instructed that a nominal plaintiff could recover for loss of comforts and protection. It may be that this

language is merely inaccurate and does no harm if the rule of damages is otherwise correctly stated. The rule in statutory actions for injuries causing death is, as shown by abundance of authority, that the damage recoverable is compensation for the pecuniary loss to the parties entitled to recovery (Railroad Co. *vs.* Morris, 26 Ill., 400; Conant *vs.* Griffin, 48 Ill., 412; Railroad Co. *vs.* Butler, 57 Pa. St., 338; Telfer *vs.* Railroad Co., 30 N. J. Law, 199; Brady *vs.* Chicago, 4 Biss., 451; Fed. Cas. No. 1796; Railroad Co. *vs.* Paulk, 24 Ga., 366; Moffatt *vs.* Tenney (Colo. Sup.), 30 Pac., 348). It cannot be readily seen how, arguing from the relations and obligations of one human being towards another, the life of any one can be of pecuniary value to another, except it be the life of a husband and father to his wife and children, to whom he owes support and education. It must be considered, however, that as our statute gives a right of recovery to any one who is of kin, in the same way that it gives it to the wife and children of deceased, merely prescribing who are prior distributees of what is recovered, the rule for estimating the loss in each case should be the same. Such a rule must be that from the proof as to age, earning capacity, health, habits, and probable duration of life the jury shall say what is the present worth of the life of deceased, with nothing to be added by way of solatium to the parties or party entitled as distributees to the proceeds of recovery and nothing for suffering or anguish of mind or body by the deceased. It is resolved into a cold question of dollars, with sentiment in no way to be taken into account. Neither does the question of mitigating or aggravating circumstances have any weight, so far as the damages denominated by our statute "compensatory" are concerned. If there should be a recovery, full compensation should be awarded, mitigating or aggravating circumstances having effect only on the question of allowing or not allowing exemplary damages in addition to full compensation.

Our statute appears to mean that if there are "aggravat-

ing circumstances attending the wrongful act, neglect, or default" for which the defendant is responsible, then exemplary damages should be added to those which are merely compensatory. In the case of Railway Co. *vs.* Prentice, 147 U. S., 101; 13 Sup. Ct., 261, Mr. Justice Gray goes into a very elaborate discussion of exemplary damages as relating to the liability of a corporation therefor, and from it we will deduce our conclusions, that being a court whose decisions should be held controlling with this court. The portion of that decision most applicable to this case is the affirmance of the case of Railway Co. *vs.* Arms, 91 U. S., 495, in which an instruction that if the jury "find that the accident was caused by gross negligence of the defendant's servants controlling the train, you may give to the plaintiff punitive or exemplary damages" was held error. The court said that, whether that was called "gross" or "ordinary" negligence, the jury could not give damages beyond the limit of compensation. "To give exemplary damages there must have been some willful misconduct, or that entire want of care which would raise the presumption of a conscious indifference of consequences." The words of our statute do not, we think, change the rule thus announced, but circumstances of aggravation to bind the principal for the act of the agent must be as above stated, or where the principal participated in a bad intent. The decision in Railway Co. *vs.* Harris, 122 U. S., 610; 7 Sup. Ct., 1286, was approved in holding the corporation liable for exemplary damages; but this was because the corporation, by its governing officers, participated in and directed all that was done, the thing done being in pursuance of an unlawful purpose to forcibly take possession of the railway occupied by another company. There bad intent by the corporation was proven. There is nothing in this record that tends in the least to show bad intent on the part of the defendant, nor is there anything to show that a servant, knowingly unfit, was employed or retained whose unfitness would or did expose its employés to danger, or any-

thing from which an argument might have been advanced that defendant was so careless of the lives of its employés that a presumption of conscious indifference as to consequences arose, unless the obstruction of the fourth left air course may be thought to show it. The defendant is shown to have resorted as usual to its inspections, and the air in the mine was never bad enough to be a warning to the employés to desist from working, even if we disregard all testimony that it was not bad at all. We scarcely think there was sufficient basis for any instruction as to exemplary damages, but if there should be produced sufficient evidence on a retrial, the court should inform the jury that exemplary damages may be added to compensatory damages if it is shown by a preponderance of evidence that the defendant exhibited such entire want of care as showed a conscious indifference to consequences. Mere neglect of a fellow-servant, however gross, would not authorize exemplary damages, unless defendant, knowing his unfitness, employed or retained him or in some way ratified his act. If there is evidence on a retrial on this subject, an instruction as to exemplary damages should be given. At all events, the jury should be explicitly informed of the nature of exemplary damages, and their attention confined to a consideration of what in the evidence, in the way of aggravating circumstances, may warrant their being given. Wherefore it is considered that the refusal of the lower court to award a new trial was error, and a new trial should be granted; this case to be remanded, with directions to the lower court to grant the same.

Smith, C. J., and Hamilton and Bantz, JJ., concur.

DESERANT *v.* CERILLOS COAL RAILROAD COMPANY.

ERROR TO THE SUPREME COURT OF THE TERRITORY OF NEW MEXICO.

No. 269. Argued April 27, 1900.—Decided May 28, 1900.

The act of Congress of March 3, 1891, concerning coal mines, makes three requirements: (1) Ventilation of not less than fifty-five feet of pure air per second, or 3300 cubic feet per minute for every fifty men at work, and in like proportions for a greater number; (2) proper appliances and machinery to force the air through the mine to the face of working places; (3) keeping all workings free from standing gas; and if either of these three requirements was neglected, to the injury of the plaintiff's intestates, the defendant was liable.

The act does not give to mine owners the privilege of reasoning on the sufficiency of appliances for ventilation, or leave to their judgment the amount of ventilation that is sufficient for the protection of miners.

It does not allow standing gas, but requires the mine to be kept clear of it, and if this is not done the consequence of neglecting it cannot be excused because some workman may disregard instructions.

It is the master's duty to furnish safe appliances and safe working places, and if the neglect of this duty concurs with that of the negligence of a fellow-servant, the master is liable.

On the issues made, and on the evidence, and regarding the provisions of the act of Congress, the instructions given by the trial court to the jury were erroneous.

THE case is stated in the opinion of the court.

Mr. Neill B. Field for plaintiff in error. *Mr. F. W. Clancy* was on his brief.

Mr. Robert Dunlap for defendant in error. *Mr. E. D. Kenna* and *Mr. R. E. Twitchell* were on his brief.

MR. JUSTICE MCKENNA delivered the opinion of the court.

This action is consolidated of three, brought by plaintiff in error, who was plaintiff in the court below and may be so called

here, as administratrix of the estates respectively of her husband, Henri Deserant, and her sons Jules Deserant and Henri Deserant, Jr.

The actions were for damages for the deaths of her said intestates by an explosion in a mine owned by defendant, and which explosion was alleged to have been caused by the negligence of plaintiff in error. The action was based upon a statute of New Mexico, which gives an action for damages to the personal representatives of a person whose death is caused by the wrongful act of another, if the person causing the injury would have been liable to an action for damages if death had not ensued.

There were two trials, both by jury, in the District Court of the Territory. The first resulted in a verdict and judgment for plaintiff. They were reversed by the Supreme Court of the Territory. 49 Pac. Rep. 807. The second resulted in a verdict and judgment for defendant. They were affirmed by the Supreme Court of the Territory. 55 Pac. Rep. 290. This writ of error was then sued out.

There is no dispute about the explosion or that the deaths of plaintiff's intestates were caused by it. The dispute is as to the cause of the explosion and the responsibility of defendant for it.

The evidence presents long and elaborate descriptions of the mine, with its "slopes, air shafts, entries, cross cuts, air courses, conduits and break throughs."

We do not think that it is necessary to repeat the descriptions. There is no controversy about them. The issue between the parties is as to the amount and sufficiency of ventilation, its obstruction, the accumulation of explosive gases, their negligent ignition, whether by a fellow-servant of plaintiff's intestates or by a representative of the defendant, making it liable, or whether the explosion was of powder accidentally ignited.

The method of ventilation was by machinery causing a circulation of air through the mine and up to the face of the working places, for the purpose of rendering harmless or expelling the noxious gases.

It is contended by plaintiff that the machinery was insufficient for that purpose, the employés of the defendant were in-

efficient and negligent, and that the air shafts had been permitted to become obstructed, whereby gases accumulated, and stood in the mine and exploded on the 27th of February, 1895, causing the deaths of plaintiff's intestates.

The means of ventilation was a fan at the entrance of the mine, which by its revolutions exhausted the air in the mine, and outside air rushed in and through the passages of the mine, and was directed where desired by means of curtains called "brattices."

It is claimed there were defects in those appliances, whereby there were leaks in the circulation of the air, and besides that water had been allowed to accumulate in the fourth left air course, which so interrupted the quantity of air which passed into room 8 of the fourth left entry that the air did not go to the face of that room, but feebly passed around the brattice at a distance of twelve or fourteen feet, thus permitting the accumulation of a dangerous body of gas, until it passed beyond the danger signals, which may have been put into the room by the fire boss, and that Donahue, the day foreman, and Flick and Kelly, all miners, entered the room on the day of the explosion, with naked lamps, and ignited the gas before they saw or had an opportunity to see the danger signal. The employés of the mine consisted of miners, rope riders, mule drivers, track men and "company men." The latter were paid by the day, and worked under the order and immediate supervision of the foreman or pit boss, while the miners were paid by the ton, and were subject to general supervision by the foreman. Besides these, there was a mine superintendent, day foreman or pit boss, night foreman or pit boss, day fire boss and night boss. There was also a mine inspector, who lived in Kansas, and periodically visited the mine and other mines owned by defendant.

It is claimed that the mine foreman and fire bosses knew of the gas in room 8, and that the deceased miners did not know it, nor have means of knowing it.

The mine was inspected day and night respectively by the day and night fire bosses, and it was the duty of each to advise each miner as he came in of the condition of his working place, and no miner was permitted into the mine to work until so advised.

The gas is explosive when mixed with certain proportions of atmospheric air. It is lighter than air, and, therefore, dispelled by a current of air, and this was the means necessary to be employed to disperse the gas. The gas when it explodes moves against the opposing current of air. In other words, expends its force in the direction from which the air comes.

On Sunday night Kilpatrick, the foreman, discovered enough gas in room 8 to crack his safety lamp, but he did not regard it as sufficient to mark the place dangerous.

On Monday morning (the explosion was on Wednesday) the day fire boss found gas in room 8, and put a danger mark above the last cross cut, but did not go back to the room again, although he knew that it was one of the worst rooms in the mine for gas. He testified that he considered the danger mark sufficient.

On Monday night before the explosion, Ray, the night fire boss, was at the face of room 8, and found no fire marks, but found a little gas, and put fire marks in the room. He inspected the mine on Tuesday, but did not visit room 8.

Donahue, mine foreman, Flick and Kelly, two "company men," were killed by the explosion, and their bodies were found in or near room 8.

The conclusion, which plaintiff claimed to be established by the evidence, is that Flick and Kelly went with Donahue, under whose direction they worked, into room 8 with naked lights, and that an explosion was caused by the gas in the room coming in contact with the lights.

The defendant, on the contrary, contended that the "explosion was of some kind or other at or in the neighborhood of room 16 in the fourth left entry of the mine, where the deceased were working as coal miners." It is claimed that the cause of the explosion is altogether of conjecture and surmise, and that the greatest evidence or effect of explosion and fire appeared in the neighborhood of rooms 16 and 17, in the entry way thereabout, and that some powder cans were found exploded, and coal dust was found coked on some of the pillars on the back of a car, and a car loaded with coal was moved several feet off the track. It is hence conjectured that the explosion

was caused by some negligent or accidental ignition of powder which instantly set fire to the coal dust, which more or less impregnated the air and the entry ways, and of particles of gas which might be found in the hollows and crevices; so that death would be caused by concussion, or by the after damp caused by the explosion. Or it is conjectured again that the explosion might have been caused by some miner, while working, suddenly striking a seam or body of gas, which was ignited by his light, and thus ignited powder near at hand.

At the close of the testimony the plaintiff and the defendant asked for peremptory instructions for their respective sides, which were refused.

The assignments of error are based on exceptions to evidence and on exceptions to instructions.

In passing on the case the Supreme Court of the Territory said that it was "unnecessary for us to consider the objections urged to the instructions given by the court below. In our opinion they were all in favor of the plaintiff, as the court should have granted the motion of the defendant, and instructed the jury to find the defendant not guilty."

In support of this conclusion it stated the theory of the plaintiff to be that the explosion was caused by an "accumulation of water previous to the explosion in a low place in the fourth left air course, a sufficient quantity of pure air was not going to the face of the workings in the fourth left entry to remove and expel the noxious gases; that Kelly and Flick, who were company men — that is, men who were paid by the day and not according to what work they did — acting under instructions from Donahue, the day pit boss, went with him or by his direction into room 8 to remove a railroad track, carrying naked lights, and that such lights set fire to the gas which had accumulated there by reason of the insufficiency of air, and caused the explosion. This theory is purely speculative, and is not supported by the evidence. It cannot be positively proved what was the initial point of the explosion or what caused it. In fact, the evidence goes to show, from measurements taken at various times by the superintendent of the mine, the pit boss and the United States inspector, that sufficient air was going through the fourth left

air course and mine to make it safe. Indeed, the evidence goes further, and shows that after the explosion and on the day of the investigation by the coroner's jury, and while much of the debris caused by the explosion was still in the fourth left air course, a sufficiency of air was passing through it over the water and debris through the low place, which was claimed by the plaintiff to have been obstructed by water, for the proper ventilation of the entry and its rooms and the expulsion of all harmful gases, and for the men and animals working there at the time of the explosion. There is no evidence that the condition of the fourth left air course was the direct or proximate cause of the explosion, and for the plaintiff to recover this must be proved by a preponderance of the evidence."

The court also held that Flick, Kelly and Donahue were fellow-servants of the deceased; therefore, if the contention of the plaintiff was true, that the gas was ignited by their negligence, the defendant had no cause for action.

We have read the evidence, and we cannot concur with the Supreme Court of the Territory that the trial court "should have granted the motion of the defendant, and instructed to find the defendant not guilty." It was for the jury to determine from the evidence the place of the explosion and its cause, and what, if any, negligence the defendant was guilty of, and the evidence offered on the issues required the submission of those questions to the jury.

The effect of the act of Flick, Kelly and Donahue we will consider hereafter.

The trial court, in giving instructions to the jury, read section 6 of the act of Congress of March 3, 1891, which is as follows:

"By section 6 of an act of Congress, approved March 3, 1891, c. 564, 26 Stat. 1104, it is provided as follows:

"'SEC. 6. That the owners or managers of every coal mine at a depth of one hundred feet or more shall provide an adequate amount of ventilation of not less than fifty-five cubic feet of pure air per second, or thirty-three hundred cubic feet per minute, per every fifty men at work in said mine and in like proportions per a greater number, which air shall by proper

appliances or machinery be forced through such mine to the face of each and every working place so as to dilute and render harmless and expel therefrom the noxious or poisonous gases, and all workings shall be kept clear of standing gas.'"

The court then instructed the jury as follows:

"If, therefore, the jury believe from the evidence that the defendant, the Cerillos Coal Railroad Company, was operating a coal mine at a depth of more than one hundred feet below the surface of the earth, and that the plaintiff's intestates respectively were employed by the defendant in the operation of said coal mine, it was, by reason of said act of Congress, the duty of the defendant to provide an adequate amount of ventilation of not less than thirty-five cubic feet of pure air per second and thirty-three hundred cubic feet per minute for every fifty men who worked in said mine, which air should have been, by proper appliances or machinery, forced through such mine to the face of each and every working place therein, so as to dilute and render harmless and expel therefrom the noxious or poisonous gases, and all workings of such mine should have been kept clear of standing gas in dangerous quantities; and if the jury believe from the evidence that the defendant, the Cerillos Coal Railroad Company, failed or neglected to provide an adequate amount of ventilation so as to dilute and render harmless and expel from the said mine the noxious poisonous gases which were generated therein, or to keep the working places of said mine clear of standing gas, such failure on the part of the defendant may be considered by the jury as evidence of negligence on the part of the defendant.

* * * * * * * *

"9. Negligence is defined to be the omission to do something which a reasonable man, guided by those considerations which ordinarily regulate the conduct of human affairs, would do, or the doing something which a prudent and reasonable man would not do. It must be determined in all cases by reference to the situation and knowledge of the parties and all the attending circumstances. If an occupation attended with danger can be prosecuted by proper precautions without fatal results, such precautions must be taken by the promoters of the pursuit

or employers of laborers therein. All occupations producing articles or works of necessity, utility or convenience, may undoubtedly be carried on and competent persons familiar with the business and having sufficient skill therein, may properly be employed upon them, but in such cases where the occupation is attended with danger to life or limb, it is incumbent on the promoters thereof, and the employers or others thereon, to take all reasonable and needed precautions to secure safety to the persons engaged in their prosecution, and for any negligence in this respect from which injury follows to the persons engaged, such promoters and employers may be held responsible and mulcted to the extent of the injury inflicted, if any. Occupations, however important, which cannot be conducted without necessary danger to life, body or limb, should not be prosecuted at all without reasonable precautions against such dangers afforded by science. The necessary danger attending them should operate as a prohibition of their pursuit without such safeguards. Indeed, it may be laid down as a legal principle that in all occupations attended with great and unusual danger, there must be used all appliances readily attainable known to science for the prevention of accidents, and that a neglect to provide such readily attainable appliances, and to keep the same in fit and suitable condition, will be regarded as proof of culpable negligence.

"10. I charge you, gentlemen, that it is the duty of the master to use reasonable care and diligence to provide a reasonably safe place in which his servants shall perform their respective duties, and also to use reasonable care and diligence to provide reasonably safe appliances for the protection of his servants, and to use reasonable care and diligence to keep such appliances in a reasonably safe condition for the protection of his servants; and the master cannot, by the delegation of any part of his duty to an agent, or servant, relieve himself of responsibility for injuries to his servants arising from the neglect of this duty. Any agent or servant of the master, appointed by him for the purpose of looking to the safety of such appliances without regard to the rank or station of such agent, or servant, is the representative of the master for such purpose,

and the negligence of any such agent or servant in such matters is, in contemplation of the law, the negligence of the master, and the master is liable for any damage occasioned thereby.

"11. Although you may believe from the evidence that the fellow-servants of the deceased by their negligence contributed to the bringing about of the explosion in which deceased were killed, yet, if you also believe from the evidence that the negligence of defendant also contributed to the same result, you must find a verdict in favor of the plaintiff, unless you believe from the evidence that plaintiff's intestates, or one of them, knew, or had means of knowledge, of such negligence of defendant, and notwithstanding such knowledge, or means of knowledge, continued to work in the mine of defendant.

"12. The law requires that the defendant shall keep the workings in its mine clear of standing gas, and if you believe from the evidence the defendant failed to keep the workings in its mine clear of standing gas, and that such failure contributed to the deaths of the deceased, then you are justified in believing defendant guilty of negligence and you must find a verdict in favor of the plaintiff, unless you believe from the evidence that the plaintiff's intestates or one of them knew of the existence of such gas and continued to work in the mine of defendant with such knowledge.

"13. If the jury believe from the evidence that the plaintiff's intestates knew or had reason to know that dangerous bodies of gas were permitted to accumulate in the open places of defendant's mine and to remain for a period of thirty-six hours or more, without any effort on the part of the agents and the servants of defendant to move the same, and that no precautions against the explosion of such gases were accustomed to be taken except to mark the open place were such gas might be with a danger mark, and plaintiff's intestates, notwithstanding such knowledge or means of knowledge, continued to work in said mine, the plaintiff's intestates thereby assumed the risk incident to such method and cannot recover if their fellow-servants ignited such gas by going over or disregarding such fire mark.

"14. If you believe from the evidence that the explosion originated in room 8 of the fourth left entry of the mine in consequence of the accumulation in said room of a body of dangerous gas, merely guarded by a fire mark or danger signal for thirty-six or forty-eight hours before the explosion, and that plaintiff's intestates did not consent or agree to work in said mine with places dangerous because of gas merely guarded by fire marks or danger signals for thirty-six or forty-eight hours, then plaintiff is entitled to recover in each case, although you may also believe that said body of dangerous gas was ignited by the negligence of fellow-servants of plaintiff's intestates."

The main charge of the court was not objected to. The objections were to certain instructions given at the request of the defendant.

They were as follows:

"1. The jury are instructed that what was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine, that were obvious or might with reasonable diligence have become known; and in the absence of evidence to the contrary, it is presumed that the defendant performed its entire duty towards the miners in that respect."

"6. Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room 8 for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room 8, and further believe from the evidence that signals of the kind described in the evidence warning against entry into said room were placed in such a manner as to be observed by the deceased Flick and Kelly, and the meaning and significance of such signal was understood by them, and such signal was known to be in use by the miners engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantity; then, if the jury believe from the evidence that such explosion was caused by Flick and Kelly

entering said room with a naked light, the defendant is entitled to, and you should render, a verdict in its favor."

"10. The burden of showing negligence on the part of the defendant, that caused the death of the persons for which this action is brought is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air course through which that portion of the mine where the deceased persons worked was ventilated. The presumption is that the mine was properly and sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find not only a partial obstruction of the air course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony the jury believe that notwithstanding the partial obstruction existed, there still was space enough in the air course unobstructed to allow the proper and sufficient ventilation of the mine and of the fourth left entry where such deceased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons.

"11. If the jury shall believe from the evidence that the defendant permitted fire gas to accumulate in room 8 of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly, or either of them, by going into the said room with a naked light, (contrary to the rules and orders of the defendant,) and by such naked light the fire gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion and injury were directly and immediately caused by the act of the fellow-servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor; and a verdict should be rendered for the defendant."

The act of Congress makes three requirements —

(1) Ventilation of not less than fifty-five feet of pure air per second, or 3300 cubic feet per minute, for every fifty men at work, and in like proportions for a greater number; (2) proper appliances and machinery to force the air through the mine

to the face of working places; (3) keeping all workings free from standing gas. If either of these three requirements was neglected, to the injury of plaintiff's intestates, the defendant was liable.

We think the instructions numbered 1, 6 and 11, given at the request of the defendant, ignored the obligations of the act of Congress, and are so far inconsistent with the other instructions that they tended to confusion and misapprehension — making the duty of the mine owner relative, not absolute, and its test what a reasonable person would do, instead of making the test and measure of duty the command of the statute. The act of Congress does not give to mine owners the privilege of reasoning on the sufficiency of appliances for ventilation or leave to their judgment the amount of ventilation that is sufficient for the protection of miners. It prescribes the amount of ventilation to be not less than fifty-five cubic feet per second; it prescribes the machinery to be adequate to force that amount of air through the mine to the face of every working place. Nor does it allow standing gas. It prescribes on the contrary that the mine shall be kept clear of standing gas. This is an imperative duty, and the consequence of neglecting it cannot be excused because some workman may disregard instructions. Congress has prescribed that duty and it cannot be omitted, and the lives of the miners committed to the chance that the care or duty of some one else will counteract the neglect and disregard of the legislative mandate.

But aside from the statute, it is very disputable if the instructions were correct. It is undoubtedly the master's duty to furnish safe appliances and safe working places, and if the neglect of this duty concurs with that of the negligence of a fellow-servant, the master has been held to be liable. *Clark* v. *Soule*, 137 Mass. 380; *Cowan, Administrator*, v. *The Chicago, Milwaukee & St. Paul Railway Co.*, 80 Wis. 284; *Sherman* v. *The Menominee River Lumber Co.*, 72 Wis. 122. See also *Hayes* v. *Michigan Central Railroad Co.*, 111 U. S. 228; *Atchison, T. & S. F. R. Co.* v. *Reesman*, 19 U. S. App. 596; *Sommer* v. *Carbon Hill Coal Co.*, 59 U. S. App. 519; *Flike* v. *Boston & Albany Railroad*, 53 N. Y. 550; *Booth* v. *Railroad Co.*,

73 N. Y. 38; *Grand Trunk Railway Co.* v. *Cummings*, 106 U. S. 700.

The principle was stated in the general charge of the court, but it was materially modified in the application, and not at all considered in giving the instructions requested by the defendant.

No exceptions, however, were taken to any portion of the general charge of the court, and no question arising thereon is open to our review on this writ of error. But as we remand the case for a new trial on account of the errors which we have pointed out irrespective of the general charge, we deem it best to say that we must not be understood as affirming anything contained in instructions numbered 11 and 12, or any other instruction which conflicts with the principles announced in *Texas & Pacific Railway Co.* v. *Archibald*, 170 U. S. 665, 671.

We do not intend to express an opinion as to the facts of the case, or of any fact, or of any of the theories of the explosion. We only mean to decide that on the issues made and on the evidence, and regarding the provisions of the act of Congress, the instructions given by the trial court to the jury were erroneous.

The judgment of the Supreme Court of the Territory is reversed, and the case remanded with instructions to reverse the judgment of the District Court and direct a new trial.